HUMAN GENES AND GENE EXPRESSION PRODUCTS

Cross-Reference to Related Applications

This application claims the benefit of U.S. provisional application serial no. 60/188,609, filed March 9, 2000, which application is incorporated herein by reference in its entirety.

Field of the Invention

The present invention relates to polynucleotides of human origin and the encoded gene products.

Background of the Invention

Identification of novel polynucleotides, particularly those that encode an expressed gene product, is important in the advancement of drug discovery, diagnostic technologies, and the understanding of the progression and nature of complex diseases such as cancer. Identification of genes expressed in different cell types isolated from sources that differ in disease state or stage, developmental stage, exposure to various environmental factors, the tissue of origin, the species from which the tissue was isolated, and the like is key to identifying the genetic factors that are responsible for the phenotypes associated with these various differences.

This invention provides novel human polynucleotides, the polypeptides encoded by these polynucleotides, and the genes and proteins corresponding to these novel polynucleotides.

Summary of the Invention

This invention relates to novel human polynucleotides and variants thereof, their encoded polypeptides and variants thereof, to genes corresponding to these polynucleotides and to proteins expressed by the genes. The invention also relates to diagnostics and therapeutics comprising such novel human polynucleotides, their corresponding genes or gene products, including probes, antisense nucleotides, and antibodies. The polynucleotides of the invention correspond to a polynucleotide comprising the sequence information of at least one of SEQ ID NOS:1-2396.

Various aspects and embodiments of the invention will be readily apparent to the ordinarily skilled artisan upon reading the description provided herein.

Detailed Description of the Invention

The invention relates to polynucleotides comprising the disclosed nucleotide sequences, to full length cDNA, mRNA genomic sequences, and genes corresponding to these sequences and degenerate variants thereof, and to polypeptides encoded by the polynucleotides of the invention and polypeptide variants. The following detailed description describes the polynucleotide compositions encompassed by the invention, methods for obtaining cDNA or genomic DNA encoding a full-length gene product, expression of these polynucleotides and genes, identification of structural motifs of the polynucleotides and genes, identification of the function of a gene product encoded by a gene corresponding to a

polynucleotide of the invention, use of the provided polynucleotides as probes and in mapping and in tissue profiling, use of the corresponding polypeptides and other gene products to raise antibodies, and use of the polynucleotides and their encoded gene products for therapeutic and diagnostic purposes.

Polynucleotide Compositions

The scope of the invention with respect to polynucleotide compositions includes, but is not necessarily limited to, polynucleotides having a sequence set forth in any one of SEQ ID NOS:1-2396; polynucleotides obtained from the biological materials described herein or other biological sources (particularly human sources) by hybridization under stringent conditions (particularly conditions of high stringency); genes corresponding to the provided polynucleotides; variants of the provided polynucleotides and their corresponding genes, particularly those variants that retain a biological activity of the encoded gene product (*e.g.*, a biological activity ascribed to a gene product corresponding to the provided polynucleotides as a result of the assignment of the gene product to a protein family(ies) and/or identification of a functional domain present in the gene product). Other nucleic acid compositions contemplated by and within the scope of the present invention will be readily apparent to one of ordinary skill in the art when provided with the disclosure here. "Polynucleotide" and "nucleic acid" as used herein with reference to nucleic acids of the composition is not intended to be limiting as to the length or structure of the nucleic acid unless specifically indicted.

The invention features polynucleotides that are expressed in human tissue, specifically human colon, breast, and/or lung tissue. Novel nucleic acid compositions of the invention of particular interest comprise a sequence set forth in any one of SEQ ID NOS:1-2396 or an identifying sequence thereof. An "identifying sequence" is a contiguous sequence of residues at least about 10 nt to about 20 nt in length, usually at least about 50 nt to about 100 nt in length, that uniquely identifies a polynucleotide sequence, *e.g.*, exhibits less than 90%, usually less than about 80% to about 85% sequence identity to any contiguous nucleotide sequence of more than about 20 nt. Thus, the subject novel nucleic acid compositions include full length cDNAs or mRNAs that encompass an identifying sequence of contiguous nucleotides from any one of SEQ ID NOS: 1-2396.

The polynucleotides of the invention also include polynucleotides having sequence similarity or sequence identity. Nucleic acids having sequence similarity are detected by hybridization under low stringency conditions, for example, at 50°C and 10XSSC (0.9 M saline/0.09 M sodium citrate) and remain bound when subjected to washing at 55°C in 1XSSC. Sequence identity can be determined by hybridization under stringent conditions, for example, at 50°C or higher and 0.1XSSC (9 mM saline/0.9 mM sodium citrate). Hybridization methods and conditions are well known in the art, see, *e.g.*, USPN 5,707,829. Nucleic acids that are substantially identical to the provided polynucleotide sequences, *e.g.* allelic variants, genetically altered versions of the gene, *etc.*, bind to the provided polynucleotide

sequences (SEQ ID NOS:1-2396) under stringent hybridization conditions. By using probes, particularly labeled probes of DNA sequences, one can isolate homologous or related genes. The source of homologous genes can be any species, *e.g.* primate species, particularly human; rodents, such as rats and mice; canines, felines, bovines, ovines, equines, yeast, nematodes, *etc.*

Preferably, hybridization is performed using at least 15 contiguous nucleotides (nt) of at least one of SEQ ID NOS:1-2396. That is, when at least 15 contiguous nt of one of the disclosed SEQ ID NOS. is used as a probe, the probe will preferentially hybridize with a nucleic acid comprising the complementary sequence, allowing the identification and retrieval of the nucleic acids that uniquely hybridize to the selected probe. Probes from more than one SEQ ID NO. can hybridize with the same nucleic acid if the cDNA from which they were derived corresponds to one mRNA. Probes of more than 15 nt can be used, e.g., probes of from about 18 nt to about 100 nt, but 15 nt represents sufficient sequence for unique identification.

The polynucleotides of the invention also include naturally occurring variants of the nucleotide sequences (*e.g.*, degenerate variants, allelic variants, *etc.*). Variants of the polynucleotides of the invention are identified by hybridization of putative variants with nucleotide sequences disclosed herein, preferably by hybridization under stringent conditions. For example, by using appropriate wash conditions, variants of the polynucleotides of the invention can be identified where the allelic variant exhibits at most about 25-30% base pair (bp) mismatches relative to the selected polynucleotide probe. In general, allelic variants contain 15-25% bp mismatches, and can contain as little as even 5-15%, or 2-5%, or 1-2% bp mismatches, as well as a single bp mismatch.

The invention also encompasses homologs corresponding to the polynucleotides of SEQ ID NOS:1-2396, where the source of homologous genes can be any mammalian species, *e.g.*, primate species, particularly human; rodents, such as rats; canines, felines, bovines, ovines, equines, yeast, nematodes, etc. Between mammalian species, *e.g.*, human and mouse, homologs generally have substantial sequence similarity, *e.g.*, at least 75% sequence identity, usually at least 90%, more usually at least 95% between nucleotide sequences. Sequence similarity is calculated based on a reference sequence, which may be a subset of a larger sequence, such as a conserved motif, coding region, flanking region, *etc.* A reference sequence will usually be at least about 18 contiguous nt long, more usually at least about 30 nt long, and may extend to the complete sequence that is being compared. Algorithms for sequence analysis are known in the art, such as gapped BLAST, described in Altschul, et al. *Nucleic Acids Res.* (1997) *25*:3389-3402.

In general, variants of the invention have a sequence identity greater than at least about 65%, preferably at least about 75%, more preferably at least about 85%, and can be greater than at least about 90% or more as determined by the Smith-Waterman homology search algorithm as implemented in

MPSRCH program (Oxford Molecular). For the purposes of this invention, a preferred method of calculating percent identity is the Smith-Waterman algorithm, using the following. Global DNA sequence identity must be greater than 65% as determined by the Smith-Waterman homology search algorithm as implemented in MPSRCH program (Oxford Molecular) using an affine gap search with the following search parameters: gap open penalty, 12; and gap extension penalty, 1.

The subject nucleic acids can be cDNAs or genomic DNAs, as well as fragments thereof, particularly fragments that encode a biologically active gene product and/or are useful in the methods disclosed herein (*e.g.*, in diagnosis, as a unique identifier of a differentially expressed gene of interest, *etc.*). The term "cDNA" as used herein is intended to include all nucleic acids that share the arrangement of sequence elements found in native mature mRNA species, where sequence elements are exons and 3' and 5' non-coding regions. Normally mRNA species have contiguous exons, with the intervening introns, when present, being removed by nuclear RNA splicing, to create a continuous open reading frame encoding a polypeptide of the invention.

A genomic sequence of interest comprises the nucleic acid present between the initiation codon and the stop codon, as defined in the listed sequences, including all of the introns that are normally present in a native chromosome. It can further include the 3' and 5' untranslated regions found in the mature mRNA. It can further include specific transcriptional and translational regulatory sequences, such as promoters, enhancers, *etc.*, including about 1 kb, but possibly more, of flanking genomic DNA at either the 5' and 3' end of the transcribed region. The genomic DNA can be isolated as a fragment of 100 kbp or smaller; and substantially free of flanking chromosomal sequence. The genomic DNA flanking the coding region, either 3' and 5', or internal regulatory sequences as sometimes found in introns, contains sequences required for proper tissue, stage-specific, or disease-state specific expression.

The nucleic acid compositions of the subject invention can encode all or a part of the subject polypeptides. Double or single stranded fragments can be obtained from the DNA sequence by chemically synthesizing oligonucleotides in accordance with conventional methods, by restriction enzyme digestion, by PCR amplification, *etc.* Isolated polynucleotides and polynucleotide fragments of the invention comprise at least about 10, about 15, about 20, about 35, about 50, about 100, about 150 to about 200, about 250 to about 300, or about 350 contiguous nt selected from the polynucleotide sequences as shown in SEQ ID NOS:1-2396. For the most part, fragments will be of at least 15 nt, usually at least 18 nt or 25 nt, and up to at least about 50 contiguous nt in length or more. In a preferred embodiment, the polynucleotide molecules comprise a contiguous sequence of at least 12 nt selected from the group consisting of the polynucleotides shown in SEQ ID NOS:1-2396.

Probes specific to the polynucleotides of the invention can be generated using the polynucleotide sequences disclosed in SEQ ID NOS:1-2396. The probes are preferably at least about a 12, 15, 16, 18, 20, 22, 24, or 25 nt fragment of a corresponding contiguous sequence of SEQ ID NOS:1-2396, and can be less than 2, 1, 0.5, 0.1, or 0.05 kb in length. The probes can be synthesized chemically or can be generated from longer polynucleotides using restriction enzymes. The probes can be labeled, for example, with a radioactive, biotinylated, or fluorescent tag. Preferably, probes are designed based upon an identifying sequence of a polynucleotide of one of SEQ ID NOS:1-2396. More preferably, probes are designed based on a contiguous sequence of one of the subject polynucleotides that remain unmasked following application of a masking program for masking low complexity (*e.g.*, XBLAST) to the sequence., *i.e.*, one would select an unmasked region, as indicated by the polynucleotides outside the poly-n stretches of the masked sequence produced by the masking program.

The polynucleotides of the subject invention are isolated and obtained in substantial purity, generally as other than an intact chromosome. Usually, the polynucleotides, either as DNA or RNA, will be obtained substantially free of other naturally-occurring nucleic acid sequences, generally being at least about 50%, usually at least about 90% pure and are typically "recombinant", *e.g.*, flanked by one or more nucleotides with which it is not normally associated on a naturally occurring chromosome.

The polynucleotides of the invention can be provided as a linear molecule or within a circular molecule, and can be provided within autonomously replicating molecules (vectors) or within molecules without replication sequences. Expression of the polynucleotides can be regulated by their own or by other regulatory sequences known in the art. The polynucleotides of the invention can be introduced into suitable host cells using a variety of techniques available in the art, such as transferrin polycation-mediated DNA transfer, transfection with naked or encapsulated nucleic acids, liposome-mediated DNA transfer, intracellular transportation of DNA-coated latex beads, protoplast fusion, viral infection, electroporation, gene gun, calcium phosphate-mediated transfection, and the like.

The subject nucleic acid compositions can be used to, for example, produce polypeptides, as probes for the detection of mRNA of the invention in biological samples (*e.g.*, extracts of human cells) to generate additional copies of the polynucleotides, to generate ribozymes or antisense oligonucleotides, and as single stranded DNA probes or as triple-strand forming oligonucleotides. The probes described herein can be used to, for example, determine the presence or absence of the polynucleotide sequences as shown in SEQ ID NOS:1-2396 or variants thereof in a sample. These and other uses are described in more detail below.

Use of Polynucleotides to Obtain Full-Length cDNA, Gene, and Promoter Region

Full-length cDNA molecules comprising the disclosed polynucleotides are obtained as follows. A polynucleotide having a sequence of one of SEQ ID NOS:1-2396, or a portion thereof comprising at

least 12, 15, 18, or 20 nt, is used as a hybridization probe to detect hybridizing members of a cDNA library using probe design methods, cloning methods, and clone selection techniques such as those described in USPN 5,654,173. Libraries of cDNA are made from selected tissues, such as normal or tumor tissue, or from tissues of a mammal treated with, for example, a pharmaceutical agent. Preferably, the tissue is the same as the tissue from which the polynucleotides of the invention were isolated, as both the polynucleotides described herein and the cDNA represent expressed genes. Most preferably, the cDNA library is made from the biological material described herein in the Examples. The choice of cell type for library construction can be made after the identity of the protein encoded by the gene corresponding to the polynucleotide of the invention is known. This will indicate which tissue and cell types are likely to express the related gene, and thus represent a suitable source for the mRNA for generating the cDNA. Where the provided polynucleotides are isolated from cDNA libraries, the libraries are prepared from mRNA of human colon cells, more preferably, human colon cancer cells, even more preferably, from a highly metastatic colon cell, Km12L4.

Techniques for producing and probing nucleic acid sequence libraries are described, for example, in Sambrook *et al.*, *Molecular Cloning: A Laboratory Manual, 2nd Ed.*, (1989) Cold Spring Harbor Press, Cold Spring Harbor, NY. The cDNA can be prepared by using primers based on sequence from SEQ ID NOS:1-2396. In one embodiment, the cDNA library can be made from only poly-adenylated mRNA. Thus, poly-T primers can be used to prepare cDNA from the mRNA.

Members of the library that are larger than the provided polynucleotides, and preferably that encompass the complete coding sequence of the native message, are obtained. In order to confirm that the entire cDNA has been obtained, RNA protection experiments are performed as follows. Hybridization of a full-length cDNA to an mRNA will protect the RNA from RNase degradation. If the cDNA is not full length, then the portions of the mRNA that are not hybridized will be subject to RNase degradation. This is assayed, as is known in the art, by changes in electrophoretic mobility on polyacrylamide gels, or by detection of released monoribonucleotides. Sambrook *et al.*, *Molecular Cloning: A Laboratory Manual, 2nd Ed.*, (1989) Cold Spring Harbor Press, Cold Spring Harbor, NY. In order to obtain additional sequences 5' to the end of a partial cDNA, 5' RACE (*PCR Protocols: A Guide to Methods and Applications*, (1990) Academic Press, Inc.) can be performed.

Genomic DNA is isolated using the provided polynucleotides in a manner similar to the isolation of full-length cDNAs. Briefly, the provided polynucleotides, or portions thereof, are used as probes to libraries of genomic DNA. Preferably, the library is obtained from the cell type that was used to generate the polynucleotides of the invention, but this is not essential. Most preferably, the genomic DNA is obtained from the biological material described herein in the Examples. Such libraries can be in vectors suitable for carrying large segments of a genome, such as P1 or YAC, as described in detail in

Sambrook *et al.*, 9.4-9.30. In addition, genomic sequences can be isolated from human BAC libraries, which are commercially available from Research Genetics, Inc., Huntsville, Alabama, USA, for example. In order to obtain additional 5' or 3' sequences, chromosome walking is performed, as described in Sambrook *et al.*, such that adjacent and overlapping fragments of genomic DNA are isolated. These are mapped and pieced together, as is known in the art, using restriction digestion enzymes and DNA ligase.

Using the polynucleotide sequences of the invention, corresponding full-length genes can be isolated using both classical and PCR methods to construct and probe cDNA libraries. Using either method, Northern blots, preferably, are performed on a number of cell types to determine which cell lines express the gene of interest at the highest level. Classical methods of constructing cDNA libraries are taught in Sambrook *et al.*, *supra*. With these methods, cDNA can be produced from mRNA and inserted into viral or expression vectors. Typically, libraries of mRNA comprising poly(A) tails can be produced with poly(T) primers. Similarly, cDNA libraries can be produced using the instant sequences as primers.

PCR methods are used to amplify the members of a cDNA library that comprise the desired insert. In this case, the desired insert will contain sequence from the full length cDNA that corresponds to the instant polynucleotides. Such PCR methods include gene trapping and RACE methods. Gene trapping entails inserting a member of a cDNA library into a vector. The vector then is denatured to produce single stranded molecules. Next, a substrate-bound probe, such a biotinylated oligo, is used to trap cDNA inserts of interest. Biotinylated probes can be linked to an avidin-bound solid substrate. PCR methods can be used to amplify the trapped cDNA. To trap sequences corresponding to the full length genes, the labeled probe sequence is based on the polynucleotide sequences of the invention. Random primers or primers specific to the library vector can be used to amplify the trapped cDNA. Such gene trapping techniques are described in Gruber *et al.*, WO 95/04745 and Gruber *et al.*, USPN 5,500,356. Kits are commercially available to perform gene trapping experiments from, for example, Life Technologies, Gaithersburg, Maryland, USA.

"Rapid amplification of cDNA ends," or RACE, is a PCR method of amplifying cDNAs from a number of different RNAs. The cDNAs are ligated to an oligonucleotide linker, and amplified by PCR using two primers. One primer is based on sequence from the instant polynucleotides, for which full length sequence is desired, and a second primer comprises sequence that hybridizes to the oligonucleotide linker to amplify the cDNA. A description of this methods is reported in WO 97/19110. In preferred embodiments of RACE, a common primer is designed to anneal to an arbitrary adaptor sequence ligated to cDNA ends (Apte and Siebert, *Biotechniques* (1993) *15*:890-893; Edwards *et al.*, *Nuc. Acids Res.* (1991) *19*:5227-5232). When a single gene-specific RACE primer is paired with the

common primer, preferential amplification of sequences between the single gene specific primer and the common primer occurs. Commercial cDNA pools modified for use in RACE are available.

Another PCR-based method generates full-length cDNA library with anchored ends without needing specific knowledge of the cDNA sequence. The method uses lock-docking primers (I-VI), where one primer, poly TV (I-III) locks over the polyA tail of eukaryotic mRNA producing first strand synthesis and a second primer, polyGH (IV-VI) locks onto the polyC tail added by terminal deoxynucleotidyl transferase (TdT)(see, e.g., WO 96/40998).

The promoter region of a gene generally is located 5' to the initiation site for RNA polymerase II. Hundreds of promoter regions contain the "TATA" box, a sequence such as TATTA or TATAA, which is sensitive to mutations. The promoter region can be obtained by performing 5' RACE using a primer from the coding region of the gene. Alternatively, the cDNA can be used as a probe for the genomic sequence, and the region 5' to the coding region is identified by "walking up." If the gene is highly expressed or differentially expressed, the promoter from the gene can be of use in a regulatory construct for a heterologous gene.

Once the full-length cDNA or gene is obtained, DNA encoding variants can be prepared by site-directed mutagenesis, described in detail in Sambrook *et al.*, 15.3-15.63. The choice of codon or nucleotide to be replaced can be based on disclosure herein on optional changes in amino acids to achieve altered protein structure and/or function.

As an alternative method to obtaining DNA or RNA from a biological material, nucleic acid comprising nucleotides having the sequence of one or more polynucleotides of the invention can be synthesized. Thus, the invention encompasses nucleic acid molecules ranging in length from 15 nt (corresponding to at least 15 contiguous nt of one of SEQ ID NOS:1-2396) up to a maximum length suitable for one or more biological manipulations, including replication and expression, of the nucleic acid molecule. The invention includes but is not limited to (a) nucleic acid having the size of a full gene, and comprising at least one of SEQ ID NOS:1-2396; (b) the nucleic acid of (a) also comprising at least one additional gene, operably linked to permit expression of a fusion protein; (c) an expression vector comprising (a) or (b); (d) a plasmid comprising (a) or (b) ; and (e) a recombinant viral particle comprising (a) or (b). Once provided with the polynucleotides disclosed herein, construction or preparation of (a) - (e) are well within the skill in the art.

The sequence of a nucleic acid comprising at least 15 contiguous nt of at least any one of SEQ ID NOS:1-2396, preferably the entire sequence of at least any one of SEQ ID NOS:1-2396, is not limited and can be any sequence of A, T, G, and/or C (for DNA) and A, U, G, and/or C (for RNA) or modified bases thereof, including inosine and pseudouridine. The choice of sequence will depend on the desired function and can be dictated by coding regions desired, the intron-like regions desired, and the

regulatory regions desired. Where the entire sequence of any one of SEQ ID NOS:1-2396 is within the nucleic acid, the nucleic acid obtained is referred to herein as a polynucleotide comprising the sequence of any one of SEQ ID NOS:1-2396.

Expression of Polypeptide Encoded by Full-Length cDNA or Full-Length Gene

The provided polynucleotides (*e.g.*, a polynucleotide having a sequence of one of SEQ ID NOS:1-2396), the corresponding cDNA, or the full-length gene is used to express a partial or complete gene product. Constructs of polynucleotides having sequences of SEQ ID NOS:1-2396 can also be generated synthetically. Alternatively, single-step assembly of a gene and entire plasmid from large numbers of oligodeoxyribonucleotides is described by, *e.g.*, Stemmer *et al., Gene (Amsterdam)* (1995) *164(1)*:49-53. In this method, assembly PCR (the synthesis of long DNA sequences from large numbers of oligodeoxyribonucleotides (oligos)) is described. The method is derived from DNA shuffling (Stemmer, *Nature* (1994) *370*:389-391), and does not rely on DNA ligase, but instead relies on DNA polymerase to build increasingly longer DNA fragments during the assembly process.

Appropriate polynucleotide constructs are purified using standard recombinant DNA techniques as described in, for example, Sambrook *et al., Molecular Cloning: A Laboratory Manual, 2nd Ed.*, (1989) Cold Spring Harbor Press, Cold Spring Harbor, NY, and under current regulations described in United States Dept. of HHS, National Institute of Health (NIH) Guidelines for Recombinant DNA Research. The gene product encoded by a polynucleotide of the invention is expressed in any expression system, including, for example, bacterial, yeast, insect, amphibian and mammalian systems. Vectors, host cells and methods for obtaining expression in same are well known in the art. Suitable vectors and host cells are described in USPN 5,654,173.

Polynucleotide molecules comprising a polynucleotide sequence provided herein are generally propagated by placing the molecule in a vector. Viral and non-viral vectors are used, including plasmids. The choice of plasmid will depend on the type of cell in which propagation is desired and the purpose of propagation. Certain vectors are useful for amplifying and making large amounts of the desired DNA sequence. Other vectors are suitable for expression in cells in culture. Still other vectors are suitable for transfer and expression in cells in a whole animal or person. The choice of appropriate vector is well within the skill of the art. Many such vectors are available commercially. Methods for preparation of vectors comprising a desired sequence are well known in the art.

The polynucleotides set forth in SEQ ID NOS:1-2396 or their corresponding full-length polynucleotides are linked to regulatory sequences as appropriate to obtain the desired expression properties. These can include promoters (attached either at the 5' end of the sense strand or at the 3' end of the antisense strand), enhancers, terminators, operators, repressors, and inducers. The promoters can be regulated or constitutive. In some situations it may be desirable to use conditionally active promoters,

such as tissue-specific or developmental stage-specific promoters. These are linked to the desired nucleotide sequence using the techniques described above for linkage to vectors. Any techniques known in the art can be used.

When any of the above host cells, or other appropriate host cells or organisms, are used to replicate and/or express the polynucleotides or nucleic acids of the invention, the resulting replicated nucleic acid, RNA, expressed protein or polypeptide, is within the scope of the invention as a product of the host cell or organism. The product is recovered by any appropriate means known in the art.

Once the gene corresponding to a selected polynucleotide is identified, its expression can be regulated in the cell to which the gene is native. For example, an endogenous gene of a cell can be regulated by an exogenous regulatory sequence as disclosed in USPN 5,641,670.

Identification of Functional and Structural Motifs of Novel Genes Screening Against Publicly Available Databases

Translations of the nucleotide sequence of the provided polynucleotides, cDNAs or full genes can be aligned with individual known sequences. Similarity with individual sequences can be used to determine the activity of the polypeptides encoded by the polynucleotides of the invention. Also, sequences exhibiting similarity with more than one individual sequence can exhibit activities that are characteristic of either or both individual sequences.

The full length sequences and fragments of the polynucleotide sequences of the nearest neighbors can be used as probes and primers to identify and isolate the full length sequence corresponding to provided polynucleotides. The nearest neighbors can indicate a tissue or cell type to be used to construct a library for the full-length sequences corresponding to the provided polynucleotides.

Typically, a selected polynucleotide is translated in all six frames to determine the best alignment with the individual sequences. The sequences disclosed herein in the Sequence Listing are in a 5' to 3' orientation and translation in three frames can be sufficient (with a few specific exceptions as described in the Examples). These amino acid sequences are referred to, generally, as query sequences, which will be aligned with the individual sequences. Databases with individual sequences are described in "Computer Methods for Macromolecular Sequence Analysis" *Methods in Enzymology* (1996) *266*, Doolittle, Academic Press, Inc., a division of Harcourt Brace & Co., San Diego, California, USA. Databases include GenBank, EMBL, and DNA Database of Japan (DDBJ).

Query and individual sequences can be aligned using the methods and computer programs described above, and include BLAST 2.0 ((National Center for Biotechnology Information, Bethesda, Maryland). See also Altschul, et al. *Nucleic Acids Res.* (1997) *25*:3389-3402. Another alignment algorithm is Fasta, available in the Genetics Computing Group (GCG) package, Madison,

Wisconsin, USA, a wholly owned subsidiary of Oxford Molecular Group, Inc. Other techniques for alignment are described in Doolittle, *supra*. Preferably, an alignment program that permits gaps in the sequence is utilized to align the sequences. The Smith-Waterman is one type of algorithm that permits gaps in sequence alignments. See *Meth. Mol. Biol.* (1997) *70*: 173-187. Also, the GAP program using the Needleman and Wunsch alignment method can be utilized to align sequences. An alternative search strategy uses MPSRCH software, which runs on a MASPAR computer. MPSRCH uses a Smith-Waterman algorithm to score sequences on a massively parallel computer. This approach improves ability to identify sequences that are distantly related matches, and is especially tolerant of small gaps and nucleotide sequence errors. Amino acid sequences encoded by the provided polynucleotides can be used to search both protein and DNA databases. Incorporated herein by reference are all sequences that have been made public as of the filing date of this application by any of the DNA or protein sequence databases, including the patent databases (*e.g.*, GeneSeq). Also incorporated by reference are those sequences that have been submitted to these databases as of the filing date of the present application but not made public until after the filing date of the present application.

Results of individual and query sequence alignments can be divided into three categories: high similarity, weak similarity, and no similarity. Individual alignment results ranging from high similarity to weak similarity provide a basis for determining polypeptide activity and/or structure. Parameters for categorizing individual results include: percentage of the alignment region length where the strongest alignment is found, percent sequence identity, and p value. The percentage of the alignment region length is calculated by counting the number of residues of the individual sequence found in the region of strongest alignment, *e.g.*, contiguous region of the individual sequence that contains the greatest number of residues that are identical to the residues of the corresponding region of the aligned query sequence. This number is divided by the total residue length of the query sequence to calculate a percentage. For example, a query sequence of 20 amino acid residues might be aligned with a 20 amino acid region of an individual sequence. The individual sequence might be identical to amino acid residues 5, 9-15, and 17-19 of the query sequence. The region of strongest alignment is thus the region stretching from residue 9-19, an 11 amino acid stretch. The percentage of the alignment region length is: 11 (length of the region of strongest alignment) divided by (query sequence length) 20 or 55%.

Percent sequence identity is calculated by counting the number of amino acid matches between the query and individual sequence and dividing total number of matches by the number of residues of the individual sequences found in the region of strongest alignment. Thus, the percent identity in the example above would be 10 matches divided by 11 amino acids, or approximately, 90.9%

P value is the probability that the alignment was produced by chance. For a single alignment, the p value can be calculated according to Karlin *et al.*, *Proc. Natl. Acad. Sci.* (1990) *87*:2264 and

Karlin *et al., Proc. Natl. Acad. Sci.* (1993) *90*. The p value of multiple alignments using the same query sequence can be calculated using an heuristic approach described in Altschul *et al., Nat. Genet.* (1994) *6*:119. Alignment programs such as BLAST program can calculate the p value. See also Altschul *et al., Nucleic Acids Res.* (1997) *25*:3389-3402.

Another factor to consider for determining identity or similarity is the location of the similarity or identity. Strong local alignment can indicate similarity even if the length of alignment is short. Sequence identity scattered throughout the length of the query sequence also can indicate a similarity between the query and profile sequences. The boundaries of the region where the sequences align can be determined according to Doolittle, *supra*; BLAST 2.0 (see, *e.g.*, Altschul, et al. *Nucleic Acids Res.* (1997) *25*:3389-3402) or FAST programs; or by determining the area where sequence identity is highest.

High Similarity. In general, in alignment results considered to be of high similarity, the percent of the alignment region length is typically at least about 55% of total length query sequence; more typically, at least about 58%; even more typically; at least about 60% of the total residue length of the query sequence. Usually, percent length of the alignment region can be as much as about 62%; more usually, as much as about 64%; even more usually, as much as about 66%. Further, for high similarity, the region of alignment, typically, exhibits at least about 75% of sequence identity; more typically, at least about 78%; even more typically; at least about 80% sequence identity. Usually, percent sequence identity can be as much as about 82%; more usually, as much as about 84%; even more usually, as much as about 86%.

The p value is used in conjunction with these methods. If high similarity is found, the query sequence is considered to have high similarity with a profile sequence when the p value is less than or equal to about 10^{-2}; more usually; less than or equal to about 10^{-3}; even more usually; less than or equal to about 10^{-4}. More typically, the p value is no more than about 10^{-5}; more typically; no more than or equal to about 10^{-10}; even more typically; no more than or equal to about 10^{-15} for the query sequence to be considered high similarity.

Weak Similarity. In general, where alignment results considered to be of weak similarity, there is no minimum percent length of the alignment region nor minimum length of alignment. A better showing of weak similarity is considered when the region of alignment is, typically, at least about 15 amino acid residues in length; more typically, at least about 20; even more typically; at least about 25 amino acid residues in length. Usually, length of the alignment region can be as much as about 30 amino acid residues; more usually, as much as about 40; even more usually, as much as about 60 amino acid residues. Further, for weak similarity, the region of alignment, typically, exhibits at least about 35% of

sequence identity; more typically, at least about 40%; even more typically; at least about 45% sequence identity. Usually, percent sequence identity can be as much as about 50%; more usually, as much as about 55%; even more usually, as much as about 60%.

If low similarity is found, the query sequence is considered to have weak similarity with a profile sequence when the p value is usually less than or equal to about 10^{-2}; more usually; less than or equal to about 10^{-3}; even more usually; less than or equal to about 10^{-4}. More typically, the p value is no more than about 10^{-5}; more usually; no more than or equal to about 10^{-10}; even more usually; no more than or equal to about 10^{-15} for the query sequence to be considered weak similarity.

Similarity Determined by Sequence Identity Alone. Sequence identity alone can be used to determine similarity of a query sequence to an individual sequence and can indicate the activity of the sequence. Such an alignment, preferably, permits gaps to align sequences. Typically, the query sequence is related to the profile sequence if the sequence identity over the entire query sequence is at least about 15%; more typically, at least about 20%; even more typically, at least about 25%; even more typically, at least about 50%. Sequence identity alone as a measure of similarity is most useful when the query sequence is usually, at least 80 residues in length; more usually, 90 residues; even more usually, at least 95 amino acid residues in length. More typically, similarity can be concluded based on sequence identity alone when the query sequence is preferably 100 residues in length; more preferably, 120 residues in length; even more preferably, 150 amino acid residues in length.

Alignments with Profile and Multiple Aligned Sequences. Translations of the provided polynucleotides can be aligned with amino acid profiles that define either protein families or common motifs. Also, translations of the provided polynucleotides can be aligned to multiple sequence alignments (MSA) comprising the polypeptide sequences of members of protein families or motifs. Similarity or identity with profile sequences or MSAs can be used to determine the activity of the gene products (*e.g.*, polypeptides) encoded by the provided polynucleotides or corresponding cDNA or genes. For example, sequences that show an identity or similarity with a chemokine profile or MSA can exhibit chemokine activities.

Profiles can designed manually by (1) creating an MSA, which is an alignment of the amino acid sequence of members that belong to the family and (2) constructing a statistical representation of the alignment. Such methods are described, for example, in Birney *et al.*, *Nucl. Acid Res.* (1996) *24(14)*: 2730-2739. MSAs of some protein families and motifs are publicly available. For example, the Pfam database available from Washington University (St. Louis, Missouri) includes MSAs of 547 different families and motifs. These MSAs are described also in Sonnhammer *et al.*, *Proteins* (1997)

28: 405-420. Other publicaly available sources include those over the world wide web provided by the European Molecular Biology Laboratory (Heidelberg, Germany). A brief description of these MSAs is reported in Pascarella *et al.*, *Prot. Eng.* (1996) *9(3)*:249-251. Techniques for building profiles from MSAs are described in Sonnhammer *et al.*, *supra*; Birney *et al.*, *supra*; and "Computer Methods for Macromolecular Sequence Analysis," *Methods in Enzymology* (1996) *266*, Doolittle, Academic Press, Inc., San Diego, California, USA.

Similarity between a query sequence and a protein family or motif can be determined by (a) comparing the query sequence against the profile and/or (b) aligning the query sequence with the members of the family or motif. Typically, a program such as Searchwise is used to compare the query sequence to the statistical representation of the multiple alignment, also known as a profile (see Birney *et al.*, *supra)*. Other techniques to compare the sequence and profile are described in Sonnhammer *et al.*, *supra* and Doolittle, *supra*.

Next, methods described by Feng *et al.*, *J. Mol. Evol.* (1987) *25*:351 and Higgins *et al.*, *CABIOS* (1989) *5*:151 can be used align the query sequence with the members of a family or motif, also known as a MSA. Sequence alignments can be generated using any of a variety of software tools. Examples include PileUp, which creates a multiple sequence alignment, and is described in Feng *et al.*, *J. Mol. Evol.* (1987) *25*:351. Another method, GAP, uses the alignment method of Needleman *et al.*, *J. Mol. Biol.* (1970) *48*:443. GAP is best suited for global alignment of sequences. A third method, BestFit, functions by inserting gaps to maximize the number of matches using the local homology algorithm of Smith *et al.*, *Adv. Appl. Math.* (1981) *2*:482. In general, the following factors are used to determine if a similarity between a query sequence and a profile or MSA exists: (1) number of conserved residues found in the query sequence, (2) percentage of conserved residues found in the query sequence, (3) number of frameshifts, and (4) spacing between conserved residues.

Some alignment programs that both translate and align sequences can make any number of frameshifts when translating the nucleotide sequence to produce the best alignment. The fewer frameshifts needed to produce an alignment, the stronger the similarity or identity between the query and profile or MSAs. For example, a weak similarity resulting from no frameshifts can be a better indication of activity or structure of a query sequence, than a strong similarity resulting from two frameshifts. Preferably, three or fewer frameshifts are found in an alignment; more preferably two or fewer frameshifts; even more preferably, one or fewer frameshifts; even more preferably, no frameshifts are found in an alignment of query and profile or MSAs.

Conserved residues are those amino acids found at a particular position in all or some of the family or motif members. Alternatively, a position is considered conserved if only a certain class of

amino acids is found in a particular position in all or some of the family members. For example, the N-terminal position can contain a positively charged amino acid, such as lysine, arginine, or histidine.

Typically, a residue of a polypeptide is conserved when a class of amino acids or a single amino acid is found at a particular position in at least about 40% of all class members; more typically, at least about 50%; even more typically, at least about 60% of the members. Usually, a residue is conserved when a class or single amino acid is found in at least about 70% of the members of a family or motif; more usually, at least about 80%; even more usually, at least about 90%; even more usually, at least about 95%.

A residue is considered conserved when three unrelated amino acids are found at a particular position in the some or all of the members; more usually, two unrelated amino acids. These residues are conserved when the unrelated amino acids are found at particular positions in at least about 40% of all class member; more typically, at least about 50%; even more typically, at least about 60% of the members. Usually, a residue is conserved when a class or single amino acid is found in at least about 70% of the members of a family or motif; more usually, at least about 80%; even more usually, at least about 90%; even more usually, at least about 95%.

A query sequence has similarity to a profile or MSA when the query sequence comprises at least about 25% of the conserved residues of the profile or MSA; more usually, at least about 30%; even more usually; at least about 40%. Typically, the query sequence has a stronger similarity to a profile sequence or MSA when the query sequence comprises at least about 45% of the conserved residues of the profile or MSA; more typically, at least about 50%; even more typically; at least about 55%.

Identification of Secreted & Membrane-Bound Polypeptides

Both secreted and membrane-bound polypeptides of the present invention are of particular interest. For example, levels of secreted polypeptides can be assayed in body fluids that are convenient, such as blood, plasma, serum, and other body fluids such as urine, prostatic fluid and semen. Membrane-bound polypeptides are useful for constructing vaccine antigens or inducing an immune response. Such antigens would comprise all or part of the extracellular region of the membrane-bound polypeptides. Because both secreted and membrane-bound polypeptides comprise a fragment of contiguous hydrophobic amino acids, hydrophobicity predicting algorithms can be used to identify such polypeptides.

A signal sequence is usually encoded by both secreted and membrane-bound polypeptide genes to direct a polypeptide to the surface of the cell. The signal sequence usually comprises a stretch of hydrophobic residues. Such signal sequences can fold into helical structures. Membrane-bound polypeptides typically comprise at least one transmembrane region that possesses a stretch of hydrophobic amino acids that can transverse the membrane. Some transmembrane regions also exhibit a

helical structure. Hydrophobic fragments within a polypeptide can be identified by using computer algorithms. Such algorithms include Hopp & Woods, *Proc. Natl. Acad. Sci. USA* (1981) *78*:3824-3828; Kyte & Doolittle, *J. Mol. Biol.* (1982) *157*: 105-132; and RAOAR algorithm, Degli Esposti *et al.*, *Eur. J. Biochem.* (1990) *190*: 207-219.

Another method of identifying secreted and membrane-bound polypeptides is to translate the polynucleotides of the invention in all six frames and determine if at least 8 contiguous hydrophobic amino acids are present. Those translated polypeptides with at least 8; more typically, 10; even more typically, 12 contiguous hydrophobic amino acids are considered to be either a putative secreted or membrane bound polypeptide. Hydrophobic amino acids include alanine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, threonine, tryptophan, tyrosine, and valine

Identification of the Function of an Expression Product of a Full-Length Gene

Ribozymes, antisense constructs, and dominant negative mutants can be used to determine function of the expression product of a gene corresponding to a polynucleotide provided herein. These methods and compositions are particularly useful where the provided novel polynucleotide exhibits no significant or substantial homology to a sequence encoding a gene of known function. Antisense molecules and ribozymes can be constructed from synthetic polynucleotides. Typically, the phosphoramidite method of oligonucleotide synthesis is used. See Beaucage *et al.*, *Tet. Lett.* (1981) *22*:1859 and USPN 4,668,777. Automated devices for synthesis are available to create oligonucleotides using this chemistry. Examples of such devices include Biosearch 8600, Models 392 and 394 by Applied Biosystems, a division of Perkin-Elmer Corp., Foster City, California, USA; and Expedite by Perceptive Biosystems, Framingham, Massachusetts, USA. Synthetic RNA, phosphate analog oligonucleotides, and chemically derivatized oligonucleotides can also be produced, and can be covalently attached to other molecules. RNA oligonucleotides can be synthesized, for example, using RNA phosphoramidites. This method can be performed on an automated synthesizer, such as Applied Biosystems, Models 392 and 394, Foster City, California, USA.

Phosphorothioate oligonucleotides can also be synthesized for antisense construction. A sulfurizing reagent, such as tetraethylthiruam disulfide (TETD) in acetonitrile can be used to convert the internucleotide cyanoethyl phosphite to the phosphorothioate triester within 15 minutes at room temperature. TETD replaces the iodine reagent, while all other reagents used for standard phosphoramidite chemistry remain the same. Such a synthesis method can be automated using Models 392 and 394 by Applied Biosystems, for example.

Oligonucleotides of up to 200 nt can be synthesized, more typically, 100 nt, more typically 50 nt; even more typically 30 to 40 nt. These synthetic fragments can be annealed and ligated together to construct larger fragments. See, for example, Sambrook *et al.*, *supra*. Trans-cleaving catalytic RNAs

(ribozymes) are RNA molecules possessing endoribonuclease activity. Ribozymes are specifically designed for a particular target, and the target message must contain a specific nucleotide sequence. They are engineered to cleave any RNA species site-specifically in the background of cellular RNA. The cleavage event renders the mRNA unstable and prevents protein expression. Importantly, ribozymes can be used to inhibit expression of a gene of unknown function for the purpose of determining its function in an in vitro or in vivo context, by detecting the phenotypic effect. One commonly used ribozyme motif is the hammerhead, for which the substrate sequence requirements are minimal. Design of the hammerhead ribozyme, as well as therapeutic uses of ribozymes, are disclosed in Usman *et al., Current Opin. Struct. Biol.* (1996) *6*:527. Methods for production of ribozymes, including hairpin structure ribozyme fragments, methods of increasing ribozyme specificity, and the like are known in the art.

The hybridizing region of the ribozyme can be modified or can be prepared as a branched structure as described in Horn and Urdea, *Nucleic Acids Res.* (1989) *17*:6959. The basic structure of the ribozymes can also be chemically altered in ways familiar to those skilled in the art, and chemically synthesized ribozymes can be administered as synthetic oligonucleotide derivatives modified by monomeric units. In a therapeutic context, liposome mediated delivery of ribozymes improves cellular uptake, as described in Birikh *et al., Eur. J. Biochem.* (1997) *245*:1.

Antisense nucleic acids are designed to specifically bind to RNA, resulting in the formation of RNA-DNA or RNA-RNA hybrids, with an arrest of DNA replication, reverse transcription or messenger RNA translation. Antisense polynucleotides based on a selected polynucleotide sequence can interfere with expression of the corresponding gene. Antisense polynucleotides are typically generated within the cell by expression from antisense constructs that contain the antisense strand as the transcribed strand. Antisense polynucleotides based on the disclosed polynucleotides will bind and/or interfere with the translation of mRNA comprising a sequence complementary to the antisense polynucleotide. The expression products of control cells and cells treated with the antisense construct are compared to detect the protein product of the gene corresponding to the polynucleotide upon which the antisense construct is based. The protein is isolated and identified using routine biochemical methods.

Given the extensive background literature and clinical experience in antisense therapy, one skilled in the art can use selected polynucleotides of the invention as additional potential therapeutics. The choice of polynucleotide can be narrowed by first testing them for binding to "hot spot" regions of the genome of cancerous cells. If a polynucleotide is identified as binding to a "hot spot", testing the polynucleotide as an antisense compound in the corresponding cancer cells is warranted.

As an alternative method for identifying function of the gene corresponding to a polynucleotide disclosed herein, dominant negative mutations are readily generated for corresponding proteins that are active as homomultimers. A mutant polypeptide will interact with wild-type polypeptides (made from

the other allele) and form a non-functional multimer. Thus, a mutation is in a substrate-binding domain, a catalytic domain, or a cellular localization domain. Preferably, the mutant polypeptide will be overproduced. Point mutations are made that have such an effect. In addition, fusion of different polypeptides of various lengths to the terminus of a protein can yield dominant negative mutants. General strategies are available for making dominant negative mutants (see, *e.g.*, Herskowitz, *Nature* (1987) *329*:219). Such techniques can be used to create loss of function mutations, which are useful for determining protein function.

Polypeptides and Variants Thereof

The polypeptides of the invention include those encoded by the disclosed polynucleotides, as well as nucleic acids that, by virtue of the degeneracy of the genetic code, are not identical in sequence to the disclosed polynucleotides. Thus, the invention includes within its scope a polypeptide encoded by a polynucleotide having the sequence of any one of SEQ ID NOS:1-2396 or a variant thereof.

In general, the term "polypeptide" as used herein refers to both the full length polypeptide encoded by the recited polynucleotide, the polypeptide encoded by the gene represented by the recited polynucleotide, as well as portions or fragments thereof. "Polypeptides" also includes variants of the naturally occurring proteins, where such variants are homologous or substantially similar to the naturally occurring protein, and can be of an origin of the same or different species as the naturally occurring protein (*e.g.*, human, murine, or some other species that naturally expresses the recited polypeptide, usually a mammalian species). In general, variant polypeptides have a sequence that has at least about 80%, usually at least about 90%, and more usually at least about 98% sequence identity with a differentially expressed polypeptide of the invention, as measured by BLAST 2.0 using the parameters described above. The variant polypeptides can be naturally or non-naturally glycosylated, *i.e.*, the polypeptide has a glycosylation pattern that differs from the glycosylation pattern found in the corresponding naturally occurring protein.

The invention also encompasses homologs of the disclosed polypeptides (or fragments thereof) where the homologs are isolated from other species, *i.e.* other animal or plant species, where such homologs, usually mammalian species, *e.g.* rodents, such as mice, rats; domestic animals, *e.g.*, horse, cow, dog, cat; and humans. By "homolog" is meant a polypeptide having at least about 35%, usually at least about 40% and more usually at least about 60% amino acid sequence identity to a particular differentially expressed protein as identified above, where sequence identity is determined using the BLAST 2.0 algorithm, with the parameters described *supra*.

In general, the polypeptides of the subject invention are provided in a non-naturally occurring environment, *e.g.* are separated from their naturally occurring environment. In certain embodiments, the subject protein is present in a composition that is enriched for the protein as compared to a control. As

such, purified polypeptide is provided, where by purified is meant that the protein is present in a composition that is substantially free of non-differentially expressed polypeptides, where by substantially free is meant that less than 90%, usually less than 60% and more usually less than 50% of the composition is made up of non-differentially expressed polypeptides.

Also within the scope of the invention are variants; variants of polypeptides include mutants, fragments, and fusions. Mutants can include amino acid substitutions, additions or deletions. The amino acid substitutions can be conservative amino acid substitutions or substitutions to eliminate non-essential amino acids, such as to alter a glycosylation site, a phosphorylation site or an acetylation site, or to minimize misfolding by substitution or deletion of one or more cysteine residues that are not necessary for function. Conservative amino acid substitutions are those that preserve the general charge, hydrophobicity/ hydrophilicity, and/or steric bulk of the amino acid substituted. Variants can be designed so as to retain or have enhanced biological activity of a particular region of the protein (*e.g.*, a functional domain and/or, where the polypeptide is a member of a protein family, a region associated with a consensus sequence). Selection of amino acid alterations for production of variants can be based upon the accessibility (interior vs. exterior) of the amino acid (see, e.g., Go *et al, Int. J. Peptide Protein Res.* (1980) *15*:211), the thermostability of the variant polypeptide (see, e.g., Querol *et al., Prot. Eng.* (1996) *9*:265), desired glycosylation sites (see, e.g., Olsen and Thomsen, *J. Gen. Microbiol.* (1991) *137*:579), desired disulfide bridges (see, e.g., Clarke *et al., Biochemistry* (1993) *32*:4322; and Wakarchuk *et al., Protein Eng.* (1994) *7*:1379), desired metal binding sites (see, e.g., Toma *et al., Biochemistry* (1991) *30*:97, and Haezerbrouck *et al., Protein Eng.* (1993) *6*:643), and desired substitutions with in proline loops (see, e.g., Masul *et al., Appl. Env. Microbiol.* (1994) *60*:3579). Cysteine-depleted muteins can be produced as disclosed in USPN 4,959,314.

Variants also include fragments of the polypeptides disclosed herein, particularly biologically active fragments and/or fragments corresponding to functional domains. Fragments of interest will typically be at least about 10 aa to at least about 15 aa in length, usually at least about 50 aa in length, and can be as long as 300 aa in length or longer, but will usually not exceed about 1000 aa in length, where the fragment will have a stretch of amino acids that is identical to a polypeptide encoded by a polynucleotide having a sequence of any SEQ ID NOS:1-2396, or a homolog thereof. The protein variants described herein are encoded by polynucleotides that are within the scope of the invention. The genetic code can be used to select the appropriate codons to construct the corresponding variants.

Computer-Related Embodiments

In general, a library of polynucleotides is a collection of sequence information, which information is provided in either biochemical form (*e.g.*, as a collection of polynucleotide molecules), or in electronic form (*e.g.*, as a collection of polynucleotide sequences stored in a computer-readable form,

as in a computer system and/or as part of a computer program). The sequence information of the polynucleotides can be used in a variety of ways, *e.g.*, as a resource for gene discovery, as a representation of sequences expressed in a selected cell type (*e.g.*, cell type markers), and/or as markers of a given disease or disease state. In general, a disease marker is a representation of a gene product that is present in all cells affected by disease either at an increased or decreased level relative to a normal cell (*e.g.*, a cell of the same or similar type that is not substantially affected by disease). For example, a polynucleotide sequence in a library can be a polynucleotide that represents an mRNA, polypeptide, or other gene product encoded by the polynucleotide, that is either overexpressed or underexpressed in a breast ductal cell affected by cancer relative to a normal (*i.e.*, substantially disease-free) breast cell.

The nucleotide sequence information of the library can be embodied in any suitable form, *e.g.*, electronic or biochemical forms. For example, a library of sequence information embodied in electronic form comprises an accessible computer data file (or, in biochemical form, a collection of nucleic acid molecules) that contains the representative nucleotide sequences of genes that are differentially expressed (*e.g.*, overexpressed or underexpressed) as between, for example, i) a cancerous cell and a normal cell; ii) a cancerous cell and a dysplastic cell; iii) a cancerous cell and a cell affected by a disease or condition other than cancer; iv) a metastatic cancerous cell and a normal cell and/or non-metastatic cancerous cell; v) a malignant cancerous cell and a non-malignant cancerous cell (or a normal cell) and/or vi) a dysplastic cell relative to a normal cell. Other combinations and comparisons of cells affected by various diseases or stages of disease will be readily apparent to the ordinarily skilled artisan. Biochemical embodiments of the library include a collection of nucleic acids that have the sequences of the genes in the library, where the nucleic acids can correspond to the entire gene in the library or to a fragment thereof, as described in greater detail below.

The polynucleotide libraries of the subject invention generally comprise sequence information of a plurality of polynucleotide sequences, where at least one of the polynucleotides has a sequence of any of SEQ ID NOS:1-2396. By plurality is meant at least 2, usually at least 3 and can include up to all of SEQ ID NOS:1-2396. The length and number of polynucleotides in the library will vary with the nature of the library, *e.g.*, if the library is an oligonucleotide array, a cDNA array, a computer database of the sequence information, etc.

Where the library is an electronic library, the nucleic acid sequence information can be present in a variety of media. "Media" refers to a manufacture, other than an isolated nucleic acid molecule, that contains the sequence information of the present invention. Such a manufacture provides the genome sequence or a subset thereof in a form that can be examined by means not directly applicable to the sequence as it exists in a nucleic acid. For example, the nucleotide sequence of the present invention, *e.g.* the nucleic acid sequences of any of the polynucleotides of SEQ ID NOS:1-2396, can be recorded

on computer readable media, *e.g.* any medium that can be read and accessed directly by a computer. Such media include, but are not limited to: magnetic storage media, such as a floppy disc, a hard disc storage medium, and a magnetic tape; optical storage media such as CD-ROM; electrical storage media such as RAM and ROM; and hybrids of these categories such as magnetic/optical storage media. One of skill in the art can readily appreciate how any of the presently known computer readable mediums can be used to create a manufacture comprising a recording of the present sequence information. "Recorded" refers to a process for storing information on computer readable medium, using any such methods as known in the art. Any convenient data storage structure can be chosen, based on the means used to access the stored information. A variety of data processor programs and formats can be used for storage, *e.g.* word processing text file, database format, *etc.* In addition to the sequence information, electronic versions of the libraries of the invention can be provided in conjunction or connection with other computer-readable information and/or other types of computer-readable files (*e.g.*, searchable files, executable files, *etc*, including, but not limited to, for example, search program software, *etc.*).

By providing the nucleotide sequence in computer readable form, the information can be accessed for a variety of purposes. Computer software to access sequence information is publicly available. For example, the gapped BLAST (Altschul *et al. Nucleic Acids Res.* (1997) *25*:3389-3402) and BLAZE (Brutlag *et al. Comp. Chem.* (1993) 17:203) search algorithms on a Sybase system can be used to identify open reading frames (ORFs) within the genome that contain homology to ORFs from other organisms.

As used herein, "a computer-based system" refers to the hardware means, software means, and data storage means used to analyze the nucleotide sequence information of the present invention. The minimum hardware of the computer-based systems of the present invention comprises a central processing unit (CPU), input means, output means, and data storage means. A skilled artisan can readily appreciate that any one of the currently available computer-based system are suitable for use in the present invention. The data storage means can comprise any manufacture comprising a recording of the present sequence information as described above, or a memory access means that can access such a manufacture.

"Search means" refers to one or more programs implemented on the computer-based system, to compare a target sequence or target structural motif, or expression levels of a polynucleotide in a sample, with the stored sequence information. Search means can be used to identify fragments or regions of the genome that match a particular target sequence or target motif. A variety of known algorithms are publicly known and commercially available, *e.g.* MacPattern (EMBL), BLASTN and BLASTX (NCBI). A "target sequence" can be any polynucleotide or amino acid sequence of six or more contiguous nucleotides or two or more amino acids, preferably from about 10 to 100 amino acids or from about 30

to 300 nt A variety of comparing means can be used to accomplish comparison of sequence information from a sample (e.g., to analyze target sequences, target motifs, or relative expression levels) with the data storage means. A skilled artisan can readily recognize that any one of the publicly available homology search programs can be used as the search means for the computer based systems of the present invention to accomplish comparison of target sequences and motifs. Computer programs to analyze expression levels in a sample and in controls are also known in the art.

A "target structural motif," or "target motif," refers to any rationally selected sequence or combination of sequences in which the sequence(s) are chosen based on a three-dimensional configuration that is formed upon the folding of the target motif, or on consensus sequences of regulatory or active sites. There are a variety of target motifs known in the art. Protein target motifs include, but are not limited to, enzyme active sites and signal sequences. Nucleic acid target motifs include, but are not limited to, hairpin structures, promoter sequences and other expression elements such as binding sites for transcription factors.

A variety of structural formats for the input and output means can be used to input and output the information in the computer-based systems of the present invention. One format for an output means ranks the relative expression levels of different polynucleotides. Such presentation provides a skilled artisan with a ranking of relative expression levels to determine a gene expression profile.

As discussed above, the "library" of the invention also encompasses biochemical libraries of the polynucleotides of SEQ ID NOS:1-2396 , *e.g.*, collections of nucleic acids representing the provided polynucleotides. The biochemical libraries can take a variety of forms, *e.g.*, a solution of cDNAs, a pattern of probe nucleic acids stably associated with a surface of a solid support (*i.e.*, an array) and the like. Of particular interest are nucleic acid arrays in which one or more of SEQ ID NOS:1-2396 is represented on the array. By array is meant a an article of manufacture that has at least a substrate with at least two distinct nucleic acid targets on one of its surfaces, where the number of distinct nucleic acids can be considerably higher, typically being at least 10 nt, usually at least 20 nt and often at least 25 nt. A variety of different array formats have been developed and are known to those of skill in the art. The arrays of the subject invention find use in a variety of applications, including gene expression analysis, drug screening, mutation analysis and the like, as disclosed in the above-listed exemplary patent documents.

In addition to the above nucleic acid libraries, analogous libraries of polypeptides are also provided, where the where the polypeptides of the library will represent at least a portion of the polypeptides encoded by SEQ ID NOS:1-2396.

Utilities

Use of Polynucleotide Probes in Mapping, and in Tissue Profiling

Polynucleotide probes, generally comprising at least 12 contiguous nt of a polynucleotide as shown in the Sequence Listing, are used for a variety of purposes, such as chromosome mapping of the polynucleotide and detection of transcription levels. Additional disclosure about preferred regions of the disclosed polynucleotide sequences is found in the Examples. A probe that hybridizes specifically to a polynucleotide disclosed herein should provide a detection signal at least 5-, 10-, or 20-fold higher than the background hybridization provided with other unrelated sequences.

Detection of Expression Levels. Nucleotide probes are used to detect expression of a gene corresponding to the provided polynucleotide. In Northern blots, mRNA is separated electrophoretically and contacted with a probe. A probe is detected as hybridizing to an mRNA species of a particular size. The amount of hybridization is quantitated to determine relative amounts of expression, for example under a particular condition. Probes are used for in situ hybridization to cells to detect expression. Probes can also be used *in vivo* for diagnostic detection of hybridizing sequences. Probes are typically labeled with a radioactive isotope. Other types of detectable labels can be used such as chromophores, fluors, and enzymes. Other examples of nucleotide hybridization assays are described in WO92/02526 and USPN 5,124,246.

Alternatively, the Polymerase Chain Reaction (PCR) is another means for detecting small amounts of target nucleic acids (see, *e.g.*, Mullis *et al.*, *Meth. Enzymol.* (1987) *155*:335; USPN 4,683,195; and USPN 4,683,202). Two primer polynucleotides nucleotides that hybridize with the target nucleic acids are used to prime the reaction. The primers can be composed of sequence within or 3' and 5' to the polynucleotides of the Sequence Listing. Alternatively, if the primers are 3' and 5' to these polynucleotides, they need not hybridize to them or the complements. After amplification of the target with a thermostable polymerase, the amplified target nucleic acids can be detected by methods known in the art, e.g., Southern blot. mRNA or cDNA can also be detected by traditional blotting techniques (e.g., Southern blot, Northern blot, etc.) described in Sambrook *et al.*, "Molecular Cloning: A Laboratory Manual" (New York, Cold Spring Harbor Laboratory, 1989) (e.g., without PCR amplification). In general, mRNA or cDNA generated from mRNA using a polymerase enzyme can be purified and separated using gel electrophoresis, and transferred to a solid support, such as nitrocellulose. The solid support is exposed to a labeled probe, washed to remove any unhybridized probe, and duplexes containing the labeled probe are detected.

Mapping. Polynucleotides of the present invention can be used to identify a chromosome on which the corresponding gene resides. Such mapping can be useful in identifying the function of the polynucleotide-related gene by its proximity to other genes with known function. Function can also be

assigned to the polynucleotide-related gene when particular syndromes or diseases map to the same chromosome. For example, use of polynucleotide probes in identification and quantification of nucleic acid sequence aberrations is described in USPN 5,783,387. An exemplary mapping method is fluorescence in situ hybridization (FISH), which facilitates comparative genomic hybridization to allow total genome assessment of changes in relative copy number of DNA sequences (see, e.g., Valdes *et al.*, *Methods in Molecular Biology* (1997) *68*:1). Polynucleotides can also be mapped to particular chromosomes using, for example, radiation hybrids or chromosome-specific hybrid panels. See Leach *et al.*, *Advances in Genetics*, (1995) *33*:63-99; Walter *et al.*, *Nature Genetics* (1994) *7*:22; Walter and Goodfellow, *Trends in Genetics* (1992) *9*:352. Panels for radiation hybrid mapping are available from Research Genetics, Inc., Huntsville, Alabama, USA. Databases for markers using various panels are publicly available via the world wide web from the Stanford Genome Center and The Whitehead Institute for Biomedical Research/MIT Center for Genome Research. The statistical program RHMAP can be used to construct a map based on the data from radiation hybridization with a measure of the relative likelihood of one order versus another. RHMAP is available via the world wide web from the University of Michigan, Center for Statistical Genetics, Ann Arbor, Michigan. In addition, commercial programs are available for identifying regions of chromosomes commonly associated with disease, such as cancer.

Tissue Typing or Profiling. Expression of specific mRNA corresponding to the provided polynucleotides can vary in different cell types and can be tissue-specific. This variation of mRNA levels in different cell types can be exploited with nucleic acid probe assays to determine tissue types. For example, PCR, branched DNA probe assays, or blotting techniques utilizing nucleic acid probes substantially identical or complementary to polynucleotides listed in the Sequence Listing can determine the presence or absence of the corresponding cDNA or mRNA.

Tissue typing can be used to identify the developmental organ or tissue source of a metastatic lesion by identifying the expression of a particular marker of that organ or tissue. If a polynucleotide is expressed only in a specific tissue type, and a metastatic lesion is found to express that polynucleotide, then the developmental source of the lesion has been identified. Expression of a particular polynucleotide can be assayed by detection of either the corresponding mRNA or the protein product. As would be readily apparent to any forensic scientist, the sequences disclosed herein are useful in differentiating human tissue from non-human tissue. In particular, these sequences are useful to differentiate human tissue from bird, reptile, and amphibian tissue, for example.

Use of Polymorphisms. A polynucleotide of the invention can be used in forensics, genetic analysis, mapping, and diagnostic applications where the corresponding region of a gene is polymorphic in the human population. Any means for detecting a polymorphism in a gene can be used, including, but

not limited to electrophoresis of protein polymorphic variants, differential sensitivity to restriction enzyme cleavage, and hybridization to allele-specific probes.

Antibody Production

Expression products of a polynucleotide of the invention, as well as the corresponding mRNA, cDNA, or complete gene, can be prepared and used for raising antibodies for experimental, diagnostic, and therapeutic purposes. For polynucleotides to which a corresponding gene has not been assigned, this provides an additional method of identifying the corresponding gene. The polynucleotide or related cDNA is expressed as described above, and antibodies are prepared. These antibodies are specific to an epitope on the polypeptide encoded by the polynucleotide, and can precipitate or bind to the corresponding native protein in a cell or tissue preparation or in a cell-free extract of an in vitro expression system.

Methods for production of antibodies that specifically bind a selected antigen are well known in the art. Immunogens for raising antibodies can be prepared by mixing a polypeptide encoded by a polynucleotide of the invention with an adjuvant, and/or by making fusion proteins with larger immunogenic proteins. Polypeptides can also be covalently linked to other larger immunogenic proteins, such as keyhole limpet hemocyanin. Immunogens are typically administered intradermally, subcutaneously, or intramuscularly to experimental animals such as rabbits, sheep, and mice, to generate antibodies. Monoclonal antibodies can be Monoclonal antibodies can be generated by isolating spleen cells and fusing myeloma cells to form hybridomas. Alternatively, the selected polynucleotide is administered directly, such as by intramuscular injection, and expressed in vivo. The expressed protein generates a variety of protein-specific immune responses, including production of antibodies, comparable to administration of the protein.

Preparations of polyclonal and monoclonal antibodies specific for polypeptides encoded by a selected polynucleotide are made using standard methods known in the art. The antibodies specifically bind to epitopes present in the polypeptides encoded by polynucleotides disclosed in the Sequence Listing. Typically, at least 6, 8, 10, or 12 contiguous amino acids are required to form an epitope. Epitopes that involve non-contiguous amino acids may require a longer polypeptide, e.g., at least 15, 25, or 50 amino acids. Antibodies that specifically bind to human polypeptides encoded by the provided polypeptides should provide a detection signal at least 5-, 10-, or 20-fold higher than a detection signal provided with other proteins when used in Western blots or other immunochemical assays. Preferably, antibodies that specifically polypeptides of the invention do not bind to other proteins in immunochemical assays at detectable levels and can immunoprecipitate the specific polypeptide from solution.

The invention also contemplates naturally occurring antibodies specific for a polypeptide of the invention. For example, serum antibodies to a polypeptide of the invention in a human population can be purified by methods well known in the art, e.g., by passing antiserum over a column to which the corresponding selected polypeptide or fusion protein is bound. The bound antibodies can then be eluted from the column, for example using a buffer with a high salt concentration.

In addition to the antibodies discussed above, the invention also contemplates genetically engineered antibodies, antibody derivatives (e.g., single chain antibodies, antibody fragments (e.g., Fab, etc.)), according to methods well known in the art.

Polynucleotides or Arrays for Diagnostics

Polynucleotide arrays provide a high throughput technique that can assay a large number of polynucleotide sequences in a sample. This technology can be used as a diagnostic and as a tool to test for differential expression, e.g., to determine function of an encoded protein. Arrays can be created by spotting polynucleotide probes onto a substrate (*e.g.*, glass, nitrocelllose, *etc.*) in a two-dimensional matrix or array having bound probes. The probes can be bound to the substrate by either covalent bonds or by non-specific interactions, such as hydrophobic interactions. Samples of polynucleotides can be detectably labeled (*e.g.*, using radioactive or fluorescent labels) and then hybridized to the probes. Double stranded polynucleotides, comprising the labeled sample polynucleotides bound to probe polynucleotides, can be detected once the unbound portion of the sample is washed away. Techniques for constructing arrays and methods of using these arrays are described in EP 799 897; WO 97/29212; WO 97/27317; EP 785 280; WO 97/02357; USPN 5,593,839; USPN 5,578,832; EP 728 520; USPN 5,599,695; EP 721 016; USPN 5,556,752; WO 95/22058; and USPN 5,631,734. Arrays can be used to, for example, examine differential expression of genes and can be used to determine gene function. For example, arrays can be used to detect differential expression of a polynucleotide between a test cell and control cell (*e.g.*, cancer cells and normal cells). For example, high expression of a particular message in a cancer cell, which is not observed in a corresponding normal cell, can indicate a cancer specific gene product. Exemplary uses of arrays are further described in, for example, Pappalarado *et al.*, *Sem. Radiation Oncol.* (1998) *8*:217; and Ramsay *Nature Biotechnol.* (1998) *16*:40.

Differential Expression in Diagnosis

The polynucleotides of the invention can also be used to detect differences in expression levels between two cells, *e.g.*, as a method to identify abnormal or diseased tissue in a human. For polynucleotides corresponding to profiles of protein families, the choice of tissue can be selected according to the putative biological function. In general, the expression of a gene corresponding to a specific polynucleotide is compared between a first tissue that is suspected of being diseased and a second, normal tissue of the human. The tissue suspected of being abnormal or diseased can be derived

from a different tissue type of the human, but preferably it is derived from the same tissue type; for example an intestinal polyp or other abnormal growth should be compared with normal intestinal tissue. The normal tissue can be the same tissue as that of the test sample, or any normal tissue of the patient, especially those that express the polynucleotide-related gene of interest (*e.g.*, brain, thymus, testis, heart, prostate, placenta, spleen, small intestine, skeletal muscle, pancreas, and the mucosal lining of the colon). A difference between the polynucleotide-related gene, mRNA, or protein in the two tissues which are compared, for example in molecular weight, amino acid or nucleotide sequence, or relative abundance, indicates a change in the gene, or a gene which regulates it, in the tissue of the human that was suspected of being diseased. Examples of detection of differential expression and its use in diagnosis of cancer are described in USPNs 5,688,641 and 5,677,125.

A genetic predisposition to disease in a human can also be detected by comparing expression levels of an mRNA or protein corresponding to a polynucleotide of the invention in a fetal tissue with levels associated in normal fetal tissue. Fetal tissues that are used for this purpose include, but are not limited to, amniotic fluid, chorionic villi, blood, and the blastomere of an in vitro-fertilized embryo. The comparable normal polynucleotide-related gene is obtained from any tissue. The mRNA or protein is obtained from a normal tissue of a human in which the polynucleotide-related gene is expressed. Differences such as alterations in the nucleotide sequence or size of the same product of the fetal polynucleotide-related gene or mRNA, or alterations in the molecular weight, amino acid sequence, or relative abundance of fetal protein, can indicate a germline mutation in the polynucleotide-related gene of the fetus, which indicates a genetic predisposition to disease. In general, diagnostic, prognostic, and other methods of the invention based on differential expression involve detection of a level or amount of a gene product, particularly a differentially expressed gene product, in a test sample obtained from a patient suspected of having or being susceptible to a disease (*e.g.*, breast cancer, lung cancer, colon cancer and/or metastatic forms thereof), and comparing the detected levels to those levels found in normal cells (*e.g.*, cells substantially unaffected by cancer) and/or other control cells (*e.g.*, to differentiate a cancerous cell from a cell affected by dysplasia). Furthermore, the severity of the disease can be assessed by comparing the detected levels of a differentially expressed gene product with those levels detected in samples representing the levels of differentially gene product associated with varying degrees of severity of disease. It should be noted that use of the term "diagnostic" herein is not necessarily meant to exclude "prognostic" or "prognosis," but rather is used as a matter of convenience.

The term "differentially expressed gene" is generally intended to encompass a polynucleotide that can, for example, include an open reading frame encoding a gene product (*e.g.*, a polypeptide), and/or introns of such genes and adjacent 5' and 3' non-coding nucleotide sequences involved in the regulation of expression, up to about 20 kb beyond the coding region, but possibly further in either

direction. The gene can be introduced into an appropriate vector for extrachromosomal maintenance or for integration into a host genome. In general, a difference in expression level associated with a decrease in expression level of at least about 25%, usually at least about 50% to 75%, more usually at least about 90% or more is indicative of a differentially expressed gene of interest, *i.e.*, a gene that is underexpressed or down-regulated in the test sample relative to a control sample. Furthermore, a difference in expression level associated with an increase in expression of at least about 25%, usually at least about 50% to 75%, more usually at least about 90% and can be at least about 1 ½-fold, usually at least about 2-fold to about 10-fold, and can be about 100-fold to about 1,000-fold increase relative to a control sample is indicative of a differentially expressed gene of interest, *i.e.*, an overexpressed or up-regulated gene.

"Differentially expressed polynucleotide" as used herein means a nucleic acid molecule (RNA or DNA) comprising a sequence that represents a differentially expressed gene, *e.g.*, the differentially expressed polynucleotide comprises a sequence (*e.g.*, an open reading frame encoding a gene product) that uniquely identifies a differentially expressed gene so that detection of the differentially expressed polynucleotide in a sample is correlated with the presence of a differentially expressed gene in a sample. "Differentially expressed polynucleotides" is also meant to encompass fragments of the disclosed polynucleotides, *e.g.*, fragments retaining biological activity, as well as nucleic acids homologous, substantially similar, or substantially identical (*e.g.*, having about 90% sequence identity) to the disclosed polynucleotides.

"Diagnosis" as used herein generally includes determination of a subject's susceptibility to a disease or disorder, determination as to whether a subject is presently affected by a disease or disorder, as well as to the prognosis of a subject affected by a disease or disorder (*e.g.*, identification of pre-metastatic or metastatic cancerous states, stages of cancer, or responsiveness of cancer to therapy). The present invention particularly encompasses diagnosis of subjects in the context of breast cancer (*e.g.*, carcinoma in situ (*e.g.*, ductal carcinoma in situ), estrogen receptor (ER)-positive breast cancer, ER-negative breast cancer, or other forms and/or stages of breast cancer), lung cancer (*e.g.*, small cell carcinoma, non-small cell carcinoma, mesothelioma, and other forms and/or stages of lung cancer), and colon cancer (*e.g.*, adenomatous polyp, colorectal carcinoma, and other forms and/or stages of colon cancer).

"Sample" or "biological sample" as used throughout here are generally meant to refer to samples of biological fluids or tissues, particularly samples obtained from tissues, especially from cells of the type associated with the disease for which the diagnostic application is designed (*e.g.*, ductal adenocarcinoma), and the like. "Samples" is also meant to encompass derivatives and fractions of such

samples (*e.g.*, cell lysates). Where the sample is solid tissue, the cells of the tissue can be dissociated or tissue sections can be analyzed.

Methods of the subject invention useful in diagnosis or prognosis typically involve comparison of the abundance of a selected differentially expressed gene product in a sample of interest with that of a control to determine any relative differences in the expression of the gene product, where the difference can be measured qualitatively and/or quantitatively. Quantitation can be accomplished, for example, by comparing the level of expression product detected in the sample with the amounts of product present in a standard curve. A comparison can be made visually; by using a technique such as densitometry, with or without computerized assistance; by preparing a representative library of cDNA clones of mRNA isolated from a test sample, sequencing the clones in the library to determine that number of cDNA clones corresponding to the same gene product, and analyzing the number of clones corresponding to that same gene product relative to the number of clones of the same gene product in a control sample; or by using an array to detect relative levels of hybridization to a selected sequence or set of sequences, and comparing the hybridization pattern to that of a control. The differences in expression are then correlated with the presence or absence of an abnormal expression pattern. A variety of different methods for determining the nucleic acid abundance in a sample are known to those of skill in the art (see, e.g., WO 97/27317).

In general, diagnostic assays of the invention involve detection of a gene product of a the polynucleotide sequence (*e.g.*, mRNA or polypeptide) that corresponds to a sequence of SEQ ID NOS:1-2396 The patient from whom the sample is obtained can be apparently healthy, susceptible to disease (*e.g.*, as determined by family history or exposure to certain environmental factors), or can already be identified as having a condition in which altered expression of a gene product of the invention is implicated.

Diagnosis can be determined based on detected gene product expression levels of a gene product encoded by at least one, preferably at least two or more, at least 3 or more, or at least 4 or more of the polynucleotides having a sequence set forth in SEQ ID NOS:1-2396, and can involve detection of expression of genes corresponding to all of SEQ ID NOS:1-2396 and/or additional sequences that can serve as additional diagnostic markers and/or reference sequences. Where the diagnostic method is designed to detect the presence or susceptibility of a patient to cancer, the assay preferably involves detection of a gene product encoded by a gene corresponding to a polynucleotide that is differentially expressed in cancer. Examples of such differentially expressed polynucleotides are described in the Examples below. Given the provided polynucleotides and information regarding their relative expression levels provided herein, assays using such polynucleotides and detection of their expression levels in diagnosis and prognosis will be readily apparent to the ordinarily skilled artisan.

Any of a variety of detectable labels can be used in connection with the various embodiments of the diagnostic methods of the invention. Suitable detectable labels include fluorochromes,(*e.g.* fluorescein isothiocyanate (FITC), rhodamine, Texas Red, phycoerythrin, allophycocyanin, 6-carboxyfluorescein (6-FAM), 2',7'-dimethoxy-4',5'-dichloro-6-carboxyfluorescein, 6-carboxy-X-rhodamine (ROX), 6-carboxy-2',4',7',4,7-hexachlorofluorescein (HEX), 5-carboxyfluorescein (5-FAM) or N,N,N',N'-tetramethyl-6-carboxyrhodamine (TAMRA)), radioactive labels, (*e.g.* ^{32}P, ^{35}S, ^{3}H, *etc.*), and the like. The detectable label can involve a two stage systems (*e.g.*, biotin-avidin, hapten-anti-hapten antibody, *etc.*)

Reagents specific for the polynucleotides and polypeptides of the invention, such as antibodies and nucleotide probes, can be supplied in a kit for detecting the presence of an expression product in a biological sample. The kit can also contain buffers or labeling components, as well as instructions for using the reagents to detect and quantify expression products in the biological sample. Exemplary embodiments of the diagnostic methods of the invention are described below in more detail.

Polypeptide detection in diagnosis. In one embodiment, the test sample is assayed for the level of a differentially expressed polypeptide. Diagnosis can be accomplished using any of a number of methods to determine the absence or presence or altered amounts of the differentially expressed polypeptide in the test sample. For example, detection can utilize staining of cells or histological sections with labeled antibodies, performed in accordance with conventional methods. Cells can be permeabilized to stain cytoplasmic molecules. In general, antibodies that specifically bind a differentially expressed polypeptide of the invention are added to a sample, and incubated for a period of time sufficient to allow binding to the epitope, usually at least about 10 minutes. The antibody can be detectably labeled for direct detection (*e.g.*, using radioisotopes, enzymes, fluorescers, chemiluminescers, and the like), or can be used in conjunction with a second stage antibody or reagent to detect binding (*e.g.*, biotin with horseradish peroxidase-conjugated avidin, a secondary antibody conjugated to a fluorescent compound, *e.g.* fluorescein, rhodamine, Texas red, *etc.*). The absence or presence of antibody binding can be determined by various methods, including flow cytometry of dissociated cells, microscopy, radiography, scintillation counting, *etc.* Any suitable alternative methods can of qualitative or quantitative detection of levels or amounts of differentially expressed polypeptide can be used, for example ELISA, western blot, immunoprecipitation, radioimmunoassay, etc.

mRNA detection. The diagnostic methods of the invention can also or alternatively involve detection of mRNA encoded by a gene corresponding to a differentially expressed polynucleotides of the invention. Any suitable qualitative or quantitative methods known in the art for detecting specific mRNAs can be used. mRNA can be detected by, for example, *in situ* hybridization in tissue sections, by reverse transcriptase-PCR, or in Northern blots containing poly A+ mRNA. One of skill in the art can

readily use these methods to determine differences in the size or amount of mRNA transcripts between two samples. mRNA expression levels in a sample can also be determined by generation of a library of expressed sequence tags (ESTs) from the sample, where the EST library is representative of sequences present in the sample (Adams, et al., (1991) *Science* 252:1651). Enumeration of the relative representation of ESTs within the library can be used to approximate the relative representation of the gene transcript within the starting sample. The results of EST analysis of a test sample can then be compared to EST analysis of a reference sample to determine the relative expression levels of a selected polynucleotide, particularly a polynucleotide corresponding to one or more of the differentially expressed genes described herein. Alternatively, gene expression in a test sample can be performed using serial analysis of gene expression (SAGE) methodology (e.g., Velculescu et al., *Science* (1995) *270*:484) or differential display (DD) methodology (see, *e.g.*, U.S. 5,776,683; and U.S. 5,807,680).

Alternatively, gene expression can be analyzed using hybridization analysis. Oligonucleotides or cDNA can be used to selectively identify or capture DNA or RNA of specific sequence composition, and the amount of RNA or cDNA hybridized to a known capture sequence determined qualitatively or quantitatively, to provide information about the relative representation of a particular message within the pool of cellular messages in a sample. Hybridization analysis can be designed to allow for concurrent screening of the relative expression of hundreds to thousands of genes by using, for example, array-based technologies having high density formats, including filters, microscope slides, or microchips, or solution-based technologies that use spectroscopic analysis (*e.g.*, mass spectrometry). One exemplary use of arrays in the diagnostic methods of the invention is described below in more detail.

Use of a single gene in diagnostic applications. The diagnostic methods of the invention can focus on the expression of a single differentially expressed gene. For example, the diagnostic method can involve detecting a differentially expressed gene, or a polymorphism of such a gene (*e.g.*, a polymorphism in an coding region or control region), that is associated with disease. Disease-associated polymorphisms can include deletion or truncation of the gene, mutations that alter expression level and/or affect activity of the encoded protein, *etc.*

A number of methods are available for analyzing nucleic acids for the presence of a specific sequence, *e.g.* a disease associated polymorphism. Where large amounts of DNA are available, genomic DNA is used directly. Alternatively, the region of interest is cloned into a suitable vector and grown in sufficient quantity for analysis. Cells that express a differentially expressed gene can be used as a source of mRNA, which can be assayed directly or reverse transcribed into cDNA for analysis. The nucleic acid can be amplified by conventional techniques, such as the polymerase chain reaction (PCR), to provide sufficient amounts for analysis, and a detectable label can be included in the amplification reaction (*e.g.*, using a detectably labeled primer or detectably labeled oligonucleotides) to facilitate detection.

Alternatively, various methods are also known in the art that utilize oligonucleotide ligation as a means of detecting polymorphisms, see e.g., Riley *et al.*, *Nucl. Acids Res.* (1990) *18*:2887; and Delahunty *et al.*, *Am. J. Hum. Genet.* (1996) *58*:1239.

The amplified or cloned sample nucleic acid can be analyzed by one of a number of methods known in the art. The nucleic acid can be sequenced by dideoxy or other methods, and the sequence of bases compared to a selected sequence, *e.g.*, to a wild-type sequence. Hybridization with the polymorphic or variant sequence can also be used to determine its presence in a sample (*e.g.*, by Southern blot, dot blot, *etc.*). The hybridization pattern of a polymorphic or variant sequence and a control sequence to an array of oligonucleotide probes immobilized on a solid support, as described in US 5,445,934, or in WO 95/35505, can also be used as a means of identifying polymorphic or variant sequences associated with disease. Single strand conformational polymorphism (SSCP) analysis, denaturing gradient gel electrophoresis (DGGE), and heteroduplex analysis in gel matrices are used to detect conformational changes created by DNA sequence variation as alterations in electrophoretic mobility. Alternatively, where a polymorphism creates or destroys a recognition site for a restriction endonuclease, the sample is digested with that endonuclease, and the products size fractionated to determine whether the fragment was digested. Fractionation is performed by gel or capillary electrophoresis, particularly acrylamide or agarose gels.

Screening for mutations in a gene can be based on the functional or antigenic characteristics of the protein. Protein truncation assays are useful in detecting deletions that can affect the biological activity of the protein. Various immunoassays designed to detect polymorphisms in proteins can be used in screening. Where many diverse genetic mutations lead to a particular disease phenotype, functional protein assays have proven to be effective screening tools. The activity of the encoded protein can be determined by comparison with the wild-type protein.

Pattern matching in diagnosis using arrays. In another embodiment, the diagnostic and/or prognostic methods of the invention involve detection of expression of a selected set of genes in a test sample to produce a test expression pattern (TEP). The TEP is compared to a reference expression pattern (REP), which is generated by detection of expression of the selected set of genes in a reference sample (*e.g.*, a positive or negative control sample). The selected set of genes includes at least one of the genes of the invention, which genes correspond to the polynucleotide sequences of SEQ ID NOS:1-2396. Of particular interest is a selected set of genes that includes gene differentially expressed in the disease for which the test sample is to be screened.

"Reference sequences" or "reference polynucleotides" as used herein in the context of differential gene expression analysis and diagnosis/prognosis refers to a selected set of polynucleotides, which selected set includes at least one or more of the differentially expressed polynucleotides described

herein. A plurality of reference sequences, preferably comprising positive and negative control sequences, can be included as reference sequences. Additional suitable reference sequences are found in GenBank, Unigene, and other nucleotide sequence databases (including, *e.g.*, expressed sequence tag (EST), partial, and full-length sequences).

"Reference array" means an array having reference sequences for use in hybridization with a sample, where the reference sequences include all, at least one of, or any subset of the differentially expressed polynucleotides described herein. Usually such an array will include at least 3 different reference sequences, and can include any one or all of the provided differentially expressed sequences. Arrays of interest can further comprise sequences, including polymorphisms, of other genetic sequences, particularly other sequences of interest for screening for a disease or disorder (*e.g.*, cancer, dysplasia, or other related or unrelated diseases, disorders, or conditions). The oligonucleotide sequence on the array will usually be at least about 12 nt in length, and can be of about the length of the provided sequences, or can extend into the flanking regions to generate fragments of 100 nt to 200 nt in length or more. Reference arrays can be produced according to any suitable methods known in the art. For example, methods of producing large arrays of oligonucleotides are described in U.S. 5,134,854, and U.S. 5,445,934 using light-directed synthesis techniques. Using a computer controlled system, a heterogeneous array of monomers is converted, through simultaneous coupling at a number of reaction sites, into a heterogeneous array of polymers. Alternatively, microarrays are generated by deposition of pre-synthesized oligonucleotides onto a solid substrate, for example as described in PCT published application no. WO 95/35505.

A "reference expression pattern" or "REP" as used herein refers to the relative levels of expression of a selected set of genes, particularly of differentially expressed genes, that is associated with a selected cell type, *e.g.*, a normal cell, a cancerous cell, a cell exposed to an environmental stimulus, and the like. A "test expression pattern" or "TEP" refers to relative levels of expression of a selected set of genes, particularly of differentially expressed genes, in a test sample (*e.g.*, a cell of unknown or suspected disease state, from which mRNA is isolated).

REPs can be generated in a variety of ways according to methods well known in the art. For example, REPs can be generated by hybridizing a control sample to an array having a selected set of polynucleotides (particularly a selected set of differentially expressed polynucleotides), acquiring the hybridization data from the array, and storing the data in a format that allows for ready comparison of the REP with a TEP. Alternatively, all expressed sequences in a control sample can be isolated and sequenced, *e.g.*, by isolating mRNA from a control sample, converting the mRNA into cDNA, and sequencing the cDNA. The resulting sequence information roughly or precisely reflects the identity and relative number of expressed sequences in the sample. The sequence information can then be stored in a

format (*e.g.*, a computer-readable format) that allows for ready comparison of the REP with a TEP. The REP can be normalized prior to or after data storage, and/or can be processed to selectively remove sequences of expressed genes that are of less interest or that might complicate analysis (*e.g.*, some or all of the sequences associated with housekeeping genes can be eliminated from REP data).

TEPs can be generated in a manner similar to REPs, *e.g.*, by hybridizing a test sample to an array having a selected set of polynucleotides, particularly a selected set of differentially expressed polynucleotides, acquiring the hybridization data from the array, and storing the data in a format that allows for ready comparison of the TEP with a REP. The REP and TEP to be used in a comparison can be generated simultaneously, or the TEP can be compared to previously generated and stored REPs.

In one embodiment of the invention, comparison of a TEP with a REP involves hybridizing a test sample with a reference array, where the reference array has one or more reference sequences for use in hybridization with a sample. The reference sequences include all, at least one of, or any subset of the differentially expressed polynucleotides described herein. Hybridization data for the test sample is acquired, the data normalized, and the produced TEP compared with a REP generated using an array having the same or similar selected set of differentially expressed polynucleotides. Probes that correspond to sequences differentially expressed between the two samples will show decreased or increased hybridization efficiency for one of the samples relative to the other.

Methods for collection of data from hybridization of samples with a reference arrays are well known in the art. For example, the polynucleotides of the reference and test samples can be generated using a detectable fluorescent label, and hybridization of the polynucleotides in the samples detected by scanning the microarrays for the presence of the detectable label using, for example, a microscope and light source for directing light at a substrate. A photon counter detects fluorescence from the substrate, while an x-y translation stage varies the location of the substrate. A confocal detection device that can be used in the subject methods is described in USPN 5,631,734. A scanning laser microscope is described in Shalon et al., *Genome Res.* (1996) *6*:639. A scan, using the appropriate excitation line, is performed for each fluorophore used. The digital images generated from the scan are then combined for subsequent analysis. For any particular array element, the ratio of the fluorescent signal from one sample (*e.g.*, a test sample) is compared to the fluorescent signal from another sample (*e.g.*, a reference sample), and the relative signal intensity determined.

Methods for analyzing the data collected from hybridization to arrays are well known in the art. For example, where detection of hybridization involves a fluorescent label, data analysis can include the steps of determining fluorescent intensity as a function of substrate position from the data collected, removing outliers, *i.e.* data deviating from a predetermined statistical distribution, and calculating the relative binding affinity of the targets from the remaining data. The resulting data can be displayed as an

image with the intensity in each region varying according to the binding affinity between targets and probes.

In general, the test sample is classified as having a gene expression profile corresponding to that associated with a disease or non-disease state by comparing the TEP generated from the test sample to one or more REPs generated from reference samples (*e.g.*, from samples associated with cancer or specific stages of cancer, dysplasia, samples affected by a disease other than cancer, normal samples, *etc.*). The criteria for a match or a substantial match between a TEP and a REP include expression of the same or substantially the same set of reference genes, as well as expression of these reference genes at substantially the same levels (*e.g.*, no significant difference between the samples for a signal associated with a selected reference sequence after normalization of the samples, or at least no greater than about 25% to about 40% difference in signal strength for a given reference sequence. In general, a pattern match between a TEP and a REP includes a match in expression, preferably a match in qualitative or quantitative expression level, of at least one of, all or any subset of the differentially expressed genes of the invention.

Pattern matching can be performed manually, or can be performed using a computer program. Methods for preparation of substrate matrices (*e.g.*, arrays), design of oligonucleotides for use with such matrices, labeling of probes, hybridization conditions, scanning of hybridized matrices, and analysis of patterns generated, including comparison analysis, are described in, for example, U.S. 5,800,992.

Targets for inhibtion of tumor growth. The polynucleotides of the invention can correspond to therapeutic targets, and modulation of expression and/or activity of these targets can provide for inhibition of tumor growth. For example, where overexpression of a gene is associated with tumor growth or metastasis, the gene product is a suitable for target for inhibition of its expression and/or activity to facilitate inihibtion of tumor growth or metastasis. The polynucleotides of the invention can correspond to such genes, and thus in some embodiments the antisense of these polynucleotides can be used to inhibit the expression of the gene and its corresponding gene product.

Diagnosis, Prognosis and Management of Cancer

The polynucleotides of the invention and their gene products are of particular interest as genetic or biochemical markers (e.g., in blood or tissues) that will detect the earliest changes along the carcinogenesis pathway and/or to monitor the efficacy of various therapies and preventive interventions. For example, the level of expression of certain polynucleotides can be indicative of a poorer prognosis, and therefore warrant more aggressive chemo- or radio-therapy for a patient or vice versa. The correlation of novel surrogate tumor specific features with response to treatment and outcome in patients can define prognostic indicators that allow the design of tailored therapy based on the molecular profile of the tumor. These therapies include antibody targeting and gene therapy. Determining expression of

certain polynucleotides and comparison of a patients profile with known expression in normal tissue and variants of the disease allows a determination of the best possible treatment for a patient, both in terms of specificity of treatment and in terms of comfort level of the patient. Surrogate tumor markers, such as polynucleotide expression, can also be used to better classify, and thus diagnose and treat, different forms and disease states of cancer. Two classifications widely used in oncology that can benefit from identification of the expression levels of the polynucleotides of the invention are staging of the cancerous disorder, and grading the nature of the cancerous tissue.

The polynucleotides of the invention can be useful to monitor patients having or susceptible to cancer to detect potentially malignant events at a molecular level before they are detectable at a gross morphological level. Furthermore, a polynucleotide of the invention identified as important for one type of cancer can also have implications for development or risk of development of other types of cancer, e.g., where a polynucleotide is differentially expressed across various cancer types. Thus, for example, expression of a polynucleotide that has clinical implications for metastatic colon cancer can also have clinical implications for stomach cancer or endometrial cancer.

Staging. Staging is a process used by physicians to describe how advanced the cancerous state is in a patient. Staging assists the physician in determining a prognosis, planning treatment and evaluating the results of such treatment. Staging systems vary with the types of cancer, but generally involve the following "TNM" system: the type of tumor, indicated by T; whether the cancer has metastasized to nearby lymph nodes, indicated by N; and whether the cancer has metastasized to more distant parts of the body, indicated by M. Generally, if a cancer is only detectable in the area of the primary lesion without having spread to any lymph nodes it is called Stage I. If it has spread only to the closest lymph nodes, it is called Stage II. In Stage III, the cancer has generally spread to the lymph nodes in near proximity to the site of the primary lesion. Cancers that have spread to a distant part of the body, such as the liver, bone, brain or other site, are Stage IV, the most advanced stage.

The polynucleotides of the invention can facilitate fine-tuning of the staging process by identifying markers for the aggresivity of a cancer, *e.g.* the metastatic potential, as well as the presence in different areas of the body. Thus, a Stage II cancer with a polynucleotide signifying a high metastatic potential cancer can be used to change a borderline Stage II tumor to a Stage III tumor, justifying more aggressive therapy. Conversely, the presence of a polynucleotide signifying a lower metastatic potential allows more conservative staging of a tumor.

Grading of cancers. Grade is a term used to describe how closely a tumor resembles normal tissue of its same type. The microscopic appearance of a tumor is used to identify tumor grade based on parameters such as cell morphology, cellular organization, and other markers of differentiation. As a general rule, the grade of a tumor corresponds to its rate of growth or aggressiveness, with

undifferentiated or high-grade tumors being more aggressive than well differentiated or low-grade tumors. The following guidelines are generally used for grading tumors: 1) GX Grade cannot be assessed; 2) G1 Well differentiated; G2 Moderately well differentiated; 3) G3 Poorly differentiated; 4) G4 Undifferentiated. The polynucleotides of the invention can be especially valuable in determining the grade of the tumor, as they not only can aid in determining the differentiation status of the cells of a tumor, they can also identify factors other than differentiation that are valuable in determining the aggressiveness of a tumor, such as metastatic potential.

Detection of lung cancer. The polynucleotides of the invention can be used to detect lung cancer in a subject. Although there are more than a dozen different kinds of lung cancer, the two main types of lung cancer are small cell and nonsmall cell, which encompass about 90% of all lung cancer cases. Small cell carcinoma (also called oat cell carcinoma) usually starts in one of the larger bronchial tubes, grows fairly rapidly, and is likely to be large by the time of diagnosis. Nonsmall cell lung cancer (NSCLC) is made up of three general subtypes of lung cancer. Epidermoid carcinoma (also called squamous cell carcinoma) usually starts in one of the larger bronchial tubes and grows relatively slowly. The size of these tumors can range from very small to quite large. Adenocarcinoma starts growing near the outside surface of the lung and can vary in both size and growth rate. Some slowly growing adenocarcinomas are described as alveolar cell cancer. Large cell carcinoma starts near the surface of the lung, grows rapidly, and the growth is usually fairly large when diagnosed. Other less common forms of lung cancer are carcinoid, cylindroma, mucoepidermoid, and malignant mesothelioma.

The polynucleotides of the invention, e.g., polynucleotides differentially expressed in normal cells versus cancerous lung cells (e.g., tumor cells of high or low metastatic potential) or between types of cancerous lung cells (e.g., high metastatic versus low metastatic), can be used to distinguish types of lung cancer as well as identifying traits specific to a certain patient's cancer and selecting an appropriate therapy. For example, if the patient's biopsy expresses a polynucleotide that is associated with a low metastatic potential, it may justify leaving a larger portion of the patient's lung in surgery to remove the lesion. Alternatively, a smaller lesion with expression of a polynucleotide that is associated with high metastatic potential may justify a more radical removal of lung tissue and/or the surrounding lymph nodes, even if no metastasis can be identified through pathological examination.

Detection of breast cancer. The majority of breast cancers are adenocarcinomas subtypes, which can be summarized as follows: 1) ductal carcinoma in situ (DCIS), including comedocarcinoma; 2) infiltrating (or invasive) ductal carcinoma (IDC); 3) lobular carcinoma in situ (LCIS); 4) infiltrating (or invasive) lobular carcinoma (ILC); 5) inflammatory breast cancer; 6) medullary carcinoma; 7) mucinous carcinoma; 8) Paget's disease of the nipple; 9) Phyllodes tumor; and 10) tubular carcinoma.

The expression of polynucleotides of the invention can be used in the diagnosis and management of breast cancer, as well as to distinguish between types of breast cancer. Detection of breast cancer can be determined using expression levels of any of the appropriate polynucleotides of the invention, either alone or in combination. Determination of the aggressive nature and/or the metastatic potential of a breast cancer can also be determined by comparing levels of one or more polynucleotides of the invention and comparing levels of another sequence known to vary in cancerous tissue, *e.g.* ER expression. In addition, development of breast cancer can be detected by examining the ratio of expression of a differentially expressed polynucleotide to the levels of steroid hormones (*e.g.*, testosterone or estrogen) or to other hormones (*e.g.*, growth hormone, insulin). Thus expression of specific marker polynucleotides can be used to discriminate between normal and cancerous breast tissue, to discriminate between breast cancers with different cells of origin, to discriminate between breast cancers with different potential metastatic rates, etc.

Detection of colon cancer. The polynucleotides of the invention exhibiting the appropriate expression pattern can be used to detect colon cancer in a subject. Colorectal cancer is one of the most common neoplasms in humans and perhaps the most frequent form of hereditary neoplasia. Prevention and early detection are key factors in controlling and curing colorectal cancer. Colorectal cancer begins as polyps, which are small, benign growths of cells that form on the inner lining of the colon. Over a period of several years, some of these polyps accumulate additional mutations and become cancerous. Multiple familial colorectal cancer disorders have been identified, which are summarized as follows: 1) Familial adenomatous polyposis (FAP); 2) Gardner's syndrome; 3) Hereditary nonpolyposis colon cancer (HNPCC); and 4) Familial colorectal cancer in Ashkenazi Jews. The expression of appropriate polynucleotides of the invention can be used in the diagnosis, prognosis and management of colorectal cancer. Detection of colon cancer can be determined using expression levels of any of these sequences alone or in combination with the levels of expression. Determination of the aggressive nature and/or the metastatic potential of a colon cancer can be determined by comparing levels of one or more polynucleotides of the invention and comparing total levels of another sequence known to vary in cancerous tissue, *e.g.*, expression of p53, DCC ras, lor FAP (see, e.g., Fearon ER, *et al.*, *Cell* (1990) *61(5)*:759; Hamilton SR *et al.*, *Cancer* (1993) *72*:957; Bodmer W, *et al.*, *Nat Genet.* (1994) *4(3)*:217; Fearon ER, *Ann N Y Acad Sci.* (1995) *768*:101). For example, development of colon cancer can be detected by examining the ratio of any of the polynucleotides of the invention to the levels of oncogenes (*e.g.* ras) or tumor suppressor genes (*e.g.* FAP or p53). Thus expression of specific marker polynucleotides can be used to discriminate between normal and cancerous colon tissue, to discriminate between colon cancers with different cells of origin, to discriminate between colon cancers with different potential metastatic rates, etc.

Detection of prostate cancer. The polynucleotides and their corresponding genes and gene products exhibiting the appropriate differential expression pattern can be used to detect prostate cancer in a subject. Over 95% of primary prostate cancers are adenocarcinomas. Signs and symptoms may include: frequent urination, especially at night, inability to urinate, trouble starting or holding back urination, a weak or interrupted urine flow and frequent pain or stiffness in the lower back, hips or upper thighs.

Many of the signs and symptoms of prostate cancer can be caused by a variety of other non-cancerous conditions. For example, one common cause of many of these signs and symptoms is a condition called benign prostatic hypertrophy, or BPH. In BPH, the prostate gets bigger and may block the flow or urine or interfere with sexual function. The methods and compositions of the invention can be used to distinguish between prostate cancer and such non-cancerous conditions. The methods of the invention can be used in conjunction with conventional methods of diagnosis, e.g., digital rectal exam and/or detection of the level of prostate specific antigen (PSA), a substance produced and secreted by the prostate.

Use of Polynucleotides to Screen for Peptide Analogs and Antagonists

Polypeptides encoded by the instant polynucleotides and corresponding full length genes can be used to screen peptide libraries to identify binding partners, such as receptors, from among the encoded polypeptides. Peptide libraries can be synthesized according to methods known in the art (see, e.g., USPN 5,010,175 , and WO 91/17823). Agonists or antagonists of the polypeptides if the invention can be screened using any available method known in the art, such as signal transduction, antibody binding, receptor binding, mitogenic assays, chemotaxis assays, etc. The assay conditions ideally should resemble the conditions under which the native activity is exhibited *in vivo*, that is, under physiologic pH, temperature, and ionic strength. Suitable agonists or antagonists will exhibit strong inhibition or enhancement of the native activity at concentrations that do not cause toxic side effects in the subject. Agonists or antagonists that compete for binding to the native polypeptide can require concentrations equal to or greater than the native concentration, while inhibitors capable of binding irreversibly to the polypeptide can be added in concentrations on the order of the native concentration.

Such screening and experimentation can lead to identification of a novel polypeptide binding partner, such as a receptor, encoded by a gene or a cDNA corresponding to a polynucleotide of the invention, and at least one peptide agonist or antagonist of the novel binding partner. Such agonists and antagonists can be used to modulate, enhance, or inhibit receptor function in cells to which the receptor is native, or in cells that possess the receptor as a result of genetic engineering. Further, if the novel receptor shares biologically important characteristics with a known receptor, information about

agonist/antagonist binding can facilitate development of improved agonists/antagonists of the known receptor.

Pharmaceutical Compositions and Therapeutic Uses

Pharmaceutical compositions of the invention can comprise polypeptides, antibodies, or polynucleotides (including antisense nucleotides and ribozymes) of the claimed invention in a therapeutically effective amount. The term "therapeutically effective amount" as used herein refers to an amount of a therapeutic agent to treat, ameliorate, or prevent a desired disease or condition, or to exhibit a detectable therapeutic or preventative effect. The effect can be detected by, for example, chemical markers or antigen levels. Therapeutic effects also include reduction in physical symptoms, such as decreased body temperature. The precise effective amount for a subject will depend upon the subject's size and health, the nature and extent of the condition, and the therapeutics or combination of therapeutics selected for administration. Thus, it is not useful to specify an exact effective amount in advance. However, the effective amount for a given situation is determined by routine experimentation and is within the judgment of the clinician. For purposes of the present invention, an effective dose will generally be from about 0.01 mg/ kg to 50 mg/kg or 0.05 mg/kg to about 10 mg/kg of the DNA constructs in the individual to which it is administered.

A pharmaceutical composition can also contain a pharmaceutically acceptable carrier. The term "pharmaceutically acceptable carrier" refers to a carrier for administration of a therapeutic agent, such as antibodies or a polypeptide, genes, and other therapeutic agents. The term refers to any pharmaceutical carrier that does not itself induce the production of antibodies harmful to the individual receiving the composition, and which can be administered without undue toxicity. Suitable carriers can be large, slowly metabolized macromolecules such as proteins, polysaccharides, polylactic acids, polyglycolic acids, polymeric amino acids, amino acid copolymers, and inactive virus particles. Such carriers are well known to those of ordinary skill in the art. Pharmaceutically acceptable carriers in therapeutic compositions can include liquids such as water, saline, glycerol and ethanol. Auxiliary substances, such as wetting or emulsifying agents, pH buffering substances, and the like, can also be present in such vehicles. Typically, the therapeutic compositions are prepared as injectables, either as liquid solutions or suspensions; solid forms suitable for solution in, or suspension in, liquid vehicles prior to injection can also be prepared. Liposomes are included within the definition of a pharmaceutically acceptable carrier. Pharmaceutically acceptable salts can also be present in the pharmaceutical composition, e.g., mineral acid salts such as hydrochlorides, hydrobromides, phosphates, sulfates, and the like; and the salts of organic acids such as acetates, propionates, malonates, benzoates, and the like. A thorough discussion of pharmaceutically acceptable excipients is available in *Remington's Pharmaceutical Sciences* (Mack Pub. Co., N.J. 1991).

Delivery Methods. Once formulated, the compositions of the invention can be (1) administered directly to the subject (*e.g.*, as polynucleotide or polypeptides); or (2) delivered ex vivo, to cells derived from the subject (*e.g.*, as in *ex vivo* gene therapy). Direct delivery of the compositions will generally be accomplished by parenteral injection, e.g., subcutaneously, intraperitoneally, intravenously or intramuscularly, intratumoral or to the interstitial space of a tissue. Other modes of administration include oral and pulmonary administration, suppositories, and transdermal applications, needles, and gene guns or hyposprays. Dosage treatment can be a single dose schedule or a multiple dose schedule.

Methods for the ex vivo delivery and reimplantation of transformed cells into a subject are known in the art and described in *e.g.*, International Publication No. WO 93/14778. Examples of cells useful in ex vivo applications include, for example, stem cells, particularly hematopoetic, lymph cells, macrophages, dendritic cells, or tumor cells. Generally, delivery of nucleic acids for both ex vivo and in vitro applications can be accomplished by, for example, dextran-mediated transfection, calcium phosphate precipitation, polybrene mediated transfection, protoplast fusion, electroporation, encapsulation of the polynucleotide(s) in liposomes, and direct microinjection of the DNA into nuclei, all well known in the art.

Once a gene corresponding to a polynucleotide of the invention has been found to correlate with a proliferative disorder, such as neoplasia, dysplasia, and hyperplasia, the disorder can be amenable to treatment by administration of a therapeutic agent based on the provided polynucleotide, corresponding polypeptide or other corresponding molecule (e.g., antisense, ribozyme, etc.).

The dose and the means of administration of the inventive pharmaceutical compositions are determined based on the specific qualities of the therapeutic composition, the condition, age, and weight of the patient, the progression of the disease, and other relevant factors. For example, administration of polynucleotide therapeutic compositions agents of the invention includes local or systemic administration, including injection, oral administration, particle gun or catheterized administration, and topical administration. Preferably, the therapeutic polynucleotide composition contains an expression construct comprising a promoter operably linked to a polynucleotide of at least 12, 22, 25, 30, or 35 contiguous nt of the polynucleotide disclosed herein. Various methods can be used to administer the therapeutic composition directly to a specific site in the body. For example, a small metastatic lesion is located and the therapeutic composition injected several times in several different locations within the body of tumor. Alternatively, arteries which serve a tumor are identified, and the therapeutic composition injected into such an artery, in order to deliver the composition directly into the tumor. A tumor that has a necrotic center is aspirated and the composition injected directly into the now empty center of the tumor. The antisense composition is directly administered to the surface of the tumor, for

example, by topical application of the composition. X-ray imaging is used to assist in certain of the above delivery methods.

Receptor-mediated targeted delivery of therapeutic compositions containing an antisense polynucleotide, subgenomic polynucleotides, or antibodies to specific tissues can also be used. Receptor-mediated DNA delivery techniques are described in, for example, Findeis *et al.*, *Trends Biotechnol.* (1993) *11*:202; Chiou *et al.*, *Gene Therapeutics: Methods And Applications Of Direct Gene Transfer* (J.A. Wolff, ed.) (1994); Wu *et al.*, *J. Biol. Chem.* (1988) *263*:621; Wu *et al.*, *J. Biol. Chem.* (1994) *269*:542; Zenke *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1990) *87*:3655; Wu *et al.*, *J. Biol. Chem.* (1991) *266*:338. Therapeutic compositions containing a polynucleotide are administered in a range of about 100 ng to about 200 mg of DNA for local administration in a gene therapy protocol. Concentration ranges of about 500 ng to about 50 mg, about 1 μg to about 2 mg, about 5 μg to about 500 μg, and about 20 μg to about 100 μg of DNA can also be used during a gene therapy protocol. Factors such as method of action (e.g., for enhancing or inhibiting levels of the encoded gene product) and efficacy of transformation and expression are considerations which will affect the dosage required for ultimate efficacy of the antisense subgenomic polynucleotides. Where greater expression is desired over a larger area of tissue, larger amounts of antisense subgenomic polynucleotides or the same amounts readministered in a successive protocol of administrations, or several administrations to different adjacent or close tissue portions of, for example, a tumor site, may be required to effect a positive therapeutic outcome. In all cases, routine experimentation in clinical trials will determine specific ranges for optimal therapeutic effect. For polynucleotide related genes encoding polypeptides or proteins with anti-inflammatory activity, suitable use, doses, and administration are described in USPN 5,654,173.

The therapeutic polynucleotides and polypeptides of the present invention can be delivered using gene delivery vehicles. The gene delivery vehicle can be of viral or non-viral origin (see generally, Jolly, *Cancer Gene Therapy* (1994) *1*:51; Kimura, *Human Gene Therapy* (1994) *5*:845; Connelly, *Human Gene Therapy* (1995) *1*:185; and Kaplitt, *Nature Genetics* (1994) *6*:148). Expression of such coding sequences can be induced using endogenous mammalian or heterologous promoters. Expression of the coding sequence can be either constitutive or regulated.

Viral-based vectors for delivery of a desired polynucleotide and expression in a desired cell are well known in the art. Exemplary viral-based vehicles include, but are not limited to, recombinant retroviruses (see, e.g., WO 90/07936; WO 94/03622; WO 93/25698; WO 93/25234; USPN 5, 219,740; WO 93/11230; WO 93/10218; USPN 4,777,127; GB Patent No. 2,200,651; EP 0 345 242; and WO 91/02805), alphavirus-based vectors (e.g., Sindbis virus vectors, Semliki forest virus (ATCC VR-67; ATCC VR-1247), Ross River virus (ATCC VR-373; ATCC VR-1246) and Venezuelan equine

encephalitis virus (ATCC VR-923; ATCC VR-1250; ATCC VR 1249; ATCC VR-532), and adeno-associated virus (AAV) vectors (see, e.g., WO 94/12649, WO 93/03769; WO 93/19191; WO 94/28938; WO 95/11984 and WO 95/00655). Administration of DNA linked to killed adenovirus as described in Curiel, *Hum. Gene Ther.* (1992) *3*:147 can also be employed.

Non-viral delivery vehicles and methods can also be employed, including, but not limited to, polycationic condensed DNA linked or unlinked to killed adenovirus alone (see, e.g., Curiel, *Hum. Gene Ther.* (1992) *3*:147); ligand-linked DNA(see, e.g., Wu, *J. Biol. Chem.* (1989) *264*:16985); eukaryotic cell delivery vehicles cells (see, e.g., USPN 5,814,482; WO 95/07994; WO 96/17072; WO 95/30763; and WO 97/42338) and nucleic charge neutralization or fusion with cell membranes. Naked DNA can also be employed. Exemplary naked DNA introduction methods are described in WO 90/11092 and USPN 5,580,859. Liposomes that can act as gene delivery vehicles are described in USPN 5,422,120; WO 95/13796; WO 94/23697; WO 91/14445; and EP 0524968. Additional approaches are described in Philip, *Mol. Cell Biol.* (1994) *14*:2411, and in Woffendin, *Proc. Natl. Acad. Sci.* (1994) *91*:1581

Further non-viral delivery suitable for use includes mechanical delivery systems such as the approach described in Woffendin *et al.*, *Proc. Natl. Acad. Sci. USA* (1994) *91*(24):11581. Moreover, the coding sequence and the product of expression of such can be delivered through deposition of photopolymerized hydrogel materials or use of ionizing radiation (see, e.g., USPN 5,206,152 and WO 92/11033). Other conventional methods for gene delivery that can be used for delivery of the coding sequence include, for example, use of hand-held gene transfer particle gun (see, e.g., USPN 5,149,655); use of ionizing radiation for activating transferred gene (see, e.g., USPN 5,206,152 and WO 92/11033).

The present invention will now be illustrated by reference to the following examples which set forth particularly advantageous embodiments. However, it should be noted that these embodiments are illustrative and are not to be construed as restricting the invention in any way.

EXAMPLES

The following examples are offered primarily for purposes of illustration. It will be readily apparent to those skilled in the art that the formulations, dosages, methods of administration, and other parameters of this invention may be further modified or substituted in various ways without departing from the spirit and scope of the invention.

Example 1: Source of Biological Materials and Overview of Novel Polynucleotides Expressed by the Biological Materials

cDNA libraries were constructed from mRNA isolated from the cell lines indicated in Table 4. The specific library from which any polynucleotide was isolated is indicated in Table 1, with the number of the entry under the "LIBRARY" column correlating to the library number in Table 4 .

Polynucleotides expressed by the selected cell lines were isolated and analyzed; the sequences of these polynucleotides were about 275-300 nucleotides in length.

The sequences of the isolated polynucleotides were first masked to eliminate low complexity sequences using the XBLAST masking program (Claverie "Effective Large-Scale Sequence Similarity Searches," In: Computer Methods for Macromolecular Sequence Analysis, Doolittle, ed., *Meth. Enzymol.* 266:212-227 Academic Press, NY, NY (1996); see particularly Claverie, in "Automated DNA Sequencing and Analysis Techniques" Adams *et al.*, eds., Chap. 36, p. 267 Academic Press, San Diego, 1994 and Claverie *et al. Comput. Chem.* (1993) 17:191). Generally, masking does not influence the final search results, except to eliminate sequences of relative little interest due to their low complexity, and to eliminate multiple "hits" based on similarity to repetitive regions common to multiple sequences, e.g., Alu repeats. The remaining sequences were then used in a BLASTN vs. GenBank search; sequences that exhibited greater than 70% overlap, 99% identity, and a p value of less than 1×10^{-40} were discarded. Sequences from this search also were discarded if the inclusive parameters were met, but the sequence was ribosomal or vector-derived.

The resulting sequences from the previous search were classified into three groups (1, 2 and 3 below) and searched in a BLASTX vs. NRP (non-redundant proteins) database search: (1) unknown (no hits in the GenBank search), (2) weak similarity (greater than 45% identity and p value of less than 1×10^{-5}), and (3) high similarity (greater than 60% overlap, greater than 80% identity, and p value less than 1×10^{-5}). Sequences having greater than 70% overlap, greater than 99% identity, and p value of less than 1×10^{-40} were discarded.

The remaining sequences were classified as unknown (no hits), weak similarity, and high similarity (parameters as above). Two searches were performed on these sequences. First, a BLAST vs. EST database search was performed and sequences with greater than 99% overlap, greater than 99% similarity and a p value of less than 1×10^{-40} were discarded. Sequences with a p value of less than 1×10^{-65} when compared to a database sequence of human origin were also excluded. Second, a BLASTN vs. Patent GeneSeq database was performed and sequences having greater than 99% identity, p value less than 1×10^{-40}, and greater than 99% overlap were discarded.

The remaining sequences were subjected to screening using other rules and redundancies in the dataset. Sequences with a p value of less than 1×10^{-111} in relation to a database sequence of human origin were specifically excluded. The final result provided the 2396 sequences listed as SEQ ID NOS:1-2396 in the accompanying Sequence Listing and summarized in Table 1 (inserted prior to

claims). Each identified polynucleotide represents sequence from at least a partial mRNA transcript.

Table 1 provides: 1) the SEQ ID NO assigned to each sequence for use in the present specification; 2) the cluster to which the sequence is assigned; 3) the sequence name used as an internal identifier of the sequence; 4) the orientation of the insert in the clone (F=forward; R=reverse); 5) the name assigned to the clone from which the sequence was isolated; and 6) the library from which the sequence was originally isolated. Because the provided polynucleotides represent partial mRNA transcripts, two or more polynucleotides of the invention may represent different regions of the same mRNA transcript and the same gene. Thus, if two or more SEQ ID NOS: are identified as belonging to the same clone, then either sequence can be used to obtain the full-length mRNA or gene.

Example 2: Results of Public Database Search to Identify Function of Gene Products

SEQ ID NOS:1-2396 were translated in all three reading frames, and the nucleotide sequences and translated amino acid sequences used as query sequences to search for homologous sequences in either the GenBank (nucleotide sequences) or Non-Redundant Protein (amino acid sequences) databases. Query and individual sequences were aligned using the BLAST 2.0 programs (National Center for Biotechnology Information, Bethesda, Maryland; see also Altschul, et al. *Nucleic Acids Res.* (1997) *25*:3389-3402). The sequences were masked to various extents to prevent searching of repetitive sequences or poly-A sequences, using the XBLAST program for masking low complexity as described above in Example 1.

Tables 2A and 2B (inserted before the claims) provide the alignment summaries having a p value of 1×10^{-2} or less indicating substantial homology between the sequences of the present invention and those of the indicated public databases. Table 2A provides the SEQ ID NO of the query sequence, the accession number of the GenBank database entry of the homologous sequence, and the p value of the alignment. Table 2B provides the SEQ ID NO of the query sequence, the accession number of the Non-Redundant Protein database entry of the homologous sequence, and the p value of the alignment. The alignments provided in Tables 2A and 2B are the best available alignment to a DNA or amino acid sequence at a time just prior to filing of the present specification. The activity of the polypeptide encoded by the SEQ ID NOS listed in Tables 2A and 2B can be extrapolated to be substantially the same or substantially similar to the activity of the reported nearest neighbor or closely related sequence. The accession number of the nearest neighbor is reported, providing a publicly available reference to the activities and functions exhibited by the nearest neighbor. The public information regarding the activities and functions of each of the nearest neighbor sequences is incorporated by reference in this application. Also incorporated by reference is all publicly available information regarding the sequence,

as well as the putative and actual activities and functions of the nearest neighbor sequences listed in Table 2B and their related sequences. The search program and database used for the alignment, as well as the calculation of the p value are also indicated.

Full length sequences or fragments of the polynucleotide sequences of the nearest neighbors can be used as probes and primers to identify and isolate the full length sequence of the corresponding polynucleotide. The nearest neighbors can indicate a tissue or cell type to be used to construct a library for the full-length sequences of the corresponding polynucleotides.

Example 3: Members of Protein Families

SEQ ID NOS:1-2396 were used to conduct a profile search as described in the specification above. Several of the polynucleotides of the invention were found to encode polypeptides having characteristics of a polypeptide belonging to a known protein family (and thus represent nmembers of these protein families) and/or comprising a known functional domain. Table provides the SEQ ID NO: of the query sequence, the profile name, and a brief description of the profile hit.

Table 3

SEQ ID	Profilename	Description
410	ATPases	ATPases Associated with Various Cellular Activities
537	ATPases	ATPases Associated with Various Cellular Activities
539	ATPases	ATPases Associated with Various Cellular Activities
540	ATPases	ATPases Associated with Various Cellular Activities
662	Rrm	RNA recognition motif. (aka RRM, RBD, or RNP domain)
683	Rrm	RNA recognition motif. (aka RRM, RBD, or RNP domain)
707	dualspecphosphatase	Dual specificity phosphatase, catalytic domain
708	Rrm	RNA recognition motif. (aka RRM, RBD, or RNP domain)
719	Efhand	EF-hand
738	ATPases	ATPases Associated with Various Cellular Activities
779	Zincfing_C2H2	Zinc finger, C2H2 type
781	Rrm	RNA recognition motif. (aka RRM, RBD, or RNP domain)
783	Rrm	RNA recognition motif. (aka RRM, RBD, or RNP domain)
1110	WD_domain	WD domain, G-beta repeats
1415	Dead_box_helic	DEAD and DEAH box helicases
1533	C2	C2 domain (prot. kinase C like)
1633	dualspecphosphatase	Dual specificity phosphatase, catalytic domain
1637	Dead_box_helic	DEAD and DEAH box helicases

Table 3		
SEQ ID	Profilename	Description
1638	Dead_box_helic	DEAD and DEAH box helicases
1744	WD_domain	WD domain, G-beta repeats
1759	BZIP	Basic region plus leucine zipper transcription factors
1993	WD_domain	WD domain, G-beta repeats
2083	WD_domain	WD domain, G-beta repeats
2209	ATPases	ATPases Associated with Various Cellular Activities
2228	Ras	Ras family
2287	Ras	Ras family
2300	neur_chan	Neurotransmitter-gated ion-channel
2302	tor_domain2	kinase domain of tors (Christoph Reinhard)
2306	homeobox	Homeobox Domain
2318	Metallothion	Metallothioneins
2327	Asp	Eukaryotic aspartyl proteases

Some polynucleotides exhibited multiple profile hits where the query sequence contains overlapping profile regions, and/or where the sequence contains two different functional domains. Each of the profile hits of Table 3 are described in more detail below. The acronyms for the profiles (provided in parentheses) are those used to identify the profile in the Pfam and Prosite databases. The Pfam database can be accessed through web sites supported by the Washington University, St. Louis (Missouri), The Sanger Centre (United Kingdom); and The Karolinska Institute Center for Genomics Research. The Prosite database is publicaly available through the ExPASy Molecular Biology Server. The public information available on the Pfam and Prosite databases regarding the various profiles, including but not limited to the activities, function, and consensus sequences of various proteins families and protein domains, is incorporated herein by reference.

Eukaryotic Aspartyl Proteases (asp; Pfam Accession No. PF00026). SEQ ID NO:2327 corresponds to a gene encoding a novel eukaryotic aspartyl protease. Aspartyl proteases, known as acid proteases, (EC 3.4.23.-) are a widely distributed family of proteolytic enzymes (Foltmann B., *Essays Biochem.* (1981) *17*:52; Davies D.R., *Annu. Rev. Biophys. Chem.* (1990) *19*:189; Rao J.K.M., *et al.*, *Biochemistry* (1991) *30*:4663) known to exist in vertebrates, fungi, plants, retroviruses and some plant viruses. Aspartate proteases of eukaryotes are monomeric enzymes which consist of two domains. Each domain contains an active site centered on a catalytic aspartyl residue. The consensus pattern to identify eukaryotic aspartyl protease is: [LIVMFGAC]-[LIVMTADN]-[LIVFSA]-D-[ST]-G-[STAV]-[STAPDENQ]- x-[LIVMFSTNC]-x-[LIVMFGTA], where D is the active site residue.

ATPases Associated with Various Cellular Activities (ATPases; Pfam Accession No. PF0004). SEQ ID NOS:410, 537, 539, 540, 738, and 2209 correspond to a sequence that encodes a member of a family of ATPases Associated with diverse cellular Activities (AAA). The AAA protein family is composed of a large number of ATPases that share a conserved region of about 220 amino acids containing an ATP-binding site (Froehlich *et al., J. Cell Biol.* (1991) *114*:443; Erdmann *et al. Cell* (1991) *64*:499; Peters *et al., EMBO J.* (1990) *9*:1757; Kunau *et al., Biochimie* (1993) *75*:209-224; Confalonieri *et al., BioEssays* (1995) *17*:639; see also the AAA Server Homepage). The AAA domain, which can be present in one or two copies, acts as an ATP-dependent protein clamp (Confalonieri *et al.* (1995) *BioEssays 17*:639) and contains a highly conserved region located in the central part of the domain. The consensus pattern is: [LIVMT]-x-[LIVMT]-[LIVMF]-x-[GATMC]-[ST]-[NS]-x(4)-[LIVM]- D-x-A-[LIFA]-x-R.

Basic Region Plus Leucine Zipper Transcription Factors (BZIP; Pfam Accession No. PF00170). SEQ ID NO:1759 represents a polynucleotide encoding a novel member of the family of basic region plus leucine zipper transcription factors. The bZIP superfamily (Hurst, *Protein Prof.* (1995) *2*:105; and Ellenberger, *Curr. Opin. Struct. Biol.* (1994) *4*:12) of eukaryotic DNA-binding transcription factors encompasses proteins that contain a basic region mediating sequence-specific DNA-binding followed by a leucine zipper required for dimerization. The consensus pattern for this protein family is: [KR]-x(1,3)-[RKSAQ]-N-x(2)-[SAQ](2)-x-[RKTAENQ]-x-R-x-[RK].

C2 domain (C2; Pfam Accession No. PF00168). SEQ ID NO:1533 corresponds to a sequence encoding a C2 domain, which is involved in calcium-dependent phospholipid binding (Davletov *J. Biol. Chem.* (1993) *268*:26386-26390) or, in proteins that do not bind calcium, the domain may facilitate binding to inositol-1,3,4,5-tetraphosphate (Fukuda et al. *J. Biol. Chem.* (1994) *269*:29206-29211; Sutton et al. *Cell* (1995) *80*:929-938). The consensus sequence is: [ACG]-x(2)-L-x(2,3)-D-x(1,2)-[NGSTLIF]-[GTMR]-x-[STAP]-D- [PA]-[FY].

DEAD and DEAH box families ATP-dependent helicases (Dead_box_helic; Pfam Accession No. PF00270). SEQ ID NOS:1415, 1637, and 1638 represent polynucleotides encoding a novel member of the DEAD and DEAH box families (Schmid et al., *Mol. Microbiol.* (1992) *6*:283; Linder et al., *Nature* (1989) *337*:121; Wassarman, et al., *Nature* (1991) *349*:463). All members of these families are involved in ATP-dependent, nucleic-acid unwinding. All DEAD box family members share a number of conserved sequence motifs, some of which are specific to the DEAD family, with others shared by other ATP-binding proteins or by proteins belonging to the helicases 'superfamily' (Hodgman *Nature* (1988) *333*:22 and *Nature* (1988) *333*:578 (Errata)). One of these motifs, called the 'D-E-A-D-box', represents a special version of the B motif of ATP-binding proteins. Proteins that have His instead of the second Asp and are 'D-E-A-H-box' proteins (Wassarman et al., *Nature* (1991) *349*:463; Harosh,

et al., *Nucleic Acids Res.* (1991) *19*:6331; Koonin , et al., *J. Gen. Virol.* (1992) *73*:989). The following signature patterns are used to identify member for both subfamilies: 1) [LIVMF](2)-D-E-A-D-[RKEN]-x-[LIVMFYGSTN]; and 2) [GSAH]-x-[LIVMF](3)-D-E-[ALIV]-H-[NECR].

Dual specificity phosphatase (DSPc; Pfam Accession No. PF00782). SEQ ID NOS:707 and 1633 correspond to sequences that encode members of a family of dual specificity phosphatases (DSPs). DSPs are Ser/Thr and Tyr protein phosphatases that comprise a tertiary fold highly similar to that of tyrosine-specific phosphatases, except for a "recognition" region connecting helix alpha1 to strand beta1. This tertiary fold may determine differences in substrate specific between VH-1 related dual specificity phosphatase (VHR), the protein tyrosine phosphatases (PTPs), and other DSPs. Phosphatases are important in the control of cell growth, proliferation, differentiation and transformation.

EF Hand (Efhand; Pfam Accession No. PF00036). SEQ ID NO:719 corresponds to a polynucleotide encoding a member of the EF-hand protein family, a calcium binding domain shared by many calcium-binding proteins belonging to the same evolutionary family (Kawasaki *et al.*, *Protein. Prof.* (1995) *2*:305-490). The domain is a twelve residue loop flanked on both sides by a twelve residue alpha-helical domain, with a calcium ion coordinated in a pentagonal bipyramidal configuration. The six residues involved in the binding are in positions 1, 3, 5, 7, 9 and 12; these residues are denoted by X, Y, Z, -Y, -X and -Z. The invariant Glu or Asp at position 12 provides two oxygens for liganding Ca (bidentate ligand). The consensus pattern includes the complete EF-hand loop as well as the first residue which follows the loop and which seem to always be hydrophobic: D-x-[DNS]-{ILVFYW}-[DENSTG]-[DNQGHRK]-{GP}-[LIVMC]-[DENQSTAGC]-x(2)-[DE]-[LIVMFYW].

Homeobox domain (homeobox; Pfam Accession No. PF00046). SEQ ID NO:2306 represents a polynucleotide encoding a protein having a homeobox domain. The 'homeobox' is a protein domain of 60 amino acids (Gehring In: Guidebook to the Homebox Genes, Duboule D., Ed., pp1-10, Oxford University Press, Oxford, (1994); Buerglin In: Guidebook to the Homebox Genes, pp25-72, Oxford University Press, Oxford, (1994); Gehring *Trends Biochem. Sci.* (1992) *17*:277-280; Gehring *et alAnnu. Rev. Genet.* (1986) *20*:147-173; Schofield *Trends Neurosci.* (1987) *10*:3-6) first identified in number of Drosophila homeotic and segmentation proteins. It is extremely well conserved in many other animals, including vertebrates. This domain binds DNA through a helix-turn-helix type of structure. Several proteins that contain a homeobox domain play an important role in development. Most of these proteins are sequence-specific DNA-bincing transcription factors. The homeobox domain is also very similar to a region of the yeast mating type proteins. These are sequence-specific DNA-binding proteins that act as master switches in yeast differentiation by controlling gene expression in a cell type-specific fashion.

A schematic representation of the homeobox domain is shown below. The helix-turn-helix region is shown by the symbols 'H' (for helix), and 't' (for turn).

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxHHHHHHHHHttttHHHHHHHHHHxxxxxxxxxx

1 60

The pattern detects homeobox sequences 24 residues long and spans positions 34 to 57 of the homeobox domain. The consensus pattern is as follows: [LIVMFYG]-[ASLVR]-x(2)-[LIVMSTACN]-x-[LIVM]-x(4)-[LIV]-[RKNQESTAIY]-[LIVFSTNKH]-W-[FYVC]-x-[NDQTAH]-x(5)-[RKNAIMW].

Metallothioneins (metalthio; Pfam Accession No. PF00131). SEQ ID NO:2318 corresponds to a polynucleotide encoding a member of the metallothionein (MT) protein family (Hamer *Annu. Rev. Biochem.* (1986) *55*:913-951; and Kagi *et al. Biochemistry* (1988) *27*:8509-8515), small proteins which bind heavy metals such as zinc, copper, cadmium, nickel, *etc.*, through clusters of thiolate bonds. MT's occur throughout the animal kingdom and are also found in higher plants, fungi and some prokaryotes. On the basis of structural relationships MT's have been subdivided into three classes. Class I includes mammalian MT's as well as MT's from crustacean and molluscs, but with clearly related primary structure. Class II groups together MT's from various species such as sea urchins, fungi, insects and cyanobacteria which display none or only very distant correspondence to class I MT's. Class III MT's are atypical polypeptides containing gamma-glutamylcysteinyl units. The consensus pattern for this protein family is: C-x-C-[GSTAP]-x(2)-C-x-C-x(2)-C-x-C-x(2)-C-x-K.

Neurotransmitter-Gated Ion-Channel (neur_chan; Pfam Accession No. PF00065). SEQ ID NO:2300 corresponds to a sequence encoding a neurotransmitter-gated ion channel. Neurotransmitter-gated ion-channels, which provide the molecular basis for rapid signal transmission at chemical synapses, are post-synaptic oligomeric transmembrane complexes that transiently form a ionic channel upon the binding of a specific neurotransmitter. Five types of neurotransmitter-gated receptors are known: 1) nicotinic acetylcholine receptor (AchR); 2) glycine receptor; 3) gamma-aminobutyric-acid (GABA) receptor; 4) serotonin 5HT3 receptor; and 5) glutamate receptor. All known sequences of subunits from neurotransmitter-gated ion-channels are structurally related, and are composed of a large extracellular glycosylated N-terminal ligand-binding domain, followed by three hydrophobic transmembrane regions that form the ionic channel, followed by an intracellular region of variable length. A fourth hydrophobic region is found at the C-terminal of the sequence. The consensus pattern is: C-x-[LIVMFQ]-x-[LIVMF]-x(2)-[FY]-P-x-D-x(3)-C, where the two C's are linked by a disulfide bond.

Ras family proteins (ras; Pfam Accession No. PF00071). SEQ ID NOS:2228 and 2287 represent polynucleotides encoding the ras family of small GTP/GDP-binding proteins (Valencia et al., 1991, Biochemistry 30:4637-4648). Ras family members generally require a specific guanine nucleotide

exchange factor (GEF) and a specific GTPase activating protein (GAP) as stimulators of overall GTPase activity. Among ras-related proteins, the highest degree of sequence conservation is found in four regions that are directly involved in guanine nucleotide binding. The first two constitute most of the phosphate and Mg2+ binding site (PM site) and are located in the first half of the G-domain. The other two regions are involved in guanosine binding and are located in the C-terminal half of the molecule. Motifs and conserved structural features of the ras-related proteins are described in Valencia et al., 1991, Biochemistry 30:4637-4648. A major consensus pattern of ras proteins is: D-T-A-G-Q-E-K-[LF]-G-G-L-R-[DE]-G-Y-Y.

RNA Recognition Motif (rrm; Pfam Accession No. PF00076). SEQ ID NOS:662, 683, 708, 781, and 783 correspond to sequence encoding an RNA recognition motif, also known as an RRM, RBD, or RNP domain. This domain, which is about 90 amino acids long, is contained in eukaryotic proteins that bind single-stranded RNA (Bandziulis et al. *Genes Dev.* (1989) *3*:431-437; Dreyfuss et al. *Trends Biochem. Sci.* (1988) *13*:86-91). Two regions within the RNA-binding domain are highly conserved: the first is a hydrophobic segment of six residues (which is called the RNP-2 motif), the second is an octapeptide motif (which is called RNP-1 or RNP-CS). The consensus pattern is: [RK]-G-{EDRKHPCG}-[AGSCI]-[FY]-[LIVA]-x-[FYLM].

Kinase Domain of Tors (tor_domain2). SEQ ID NO:2302 corresponds to a member of the TOR lipid kinase protein family. This family is composed of large proteins with a lipid and protein kinase domain and characterized through their sensitivity to rapamycin (an antifungal compound). TOR proteins are involved in signal transduction downstream of PI3 kinase and many other signals. TOR (also called FRAP, RAFT) plays a role in regulating protein synthesis and cell growth., and in yeast controls translation initiation and early G1 progression. See, *e.g.*, Barbet *et al. Mol Biol Cell.* (1996) *7*(1):25-42; Helliwell *et al. Genetics* (1998) *148*:99-112.

WD Domain, G-Beta Repeats (WD_domain; Pfam Accession No. PF00400). SEQ ID NOS:1110, 1744, 1993, and 2083 represent novel members of the WD domain/G-beta repeat family. Beta-transducin (G-beta) is one of the three subunits (alpha, beta, and gamma) of the guanine nucleotide-binding proteins (G proteins) which act as intermediaries in the transduction of signals generated by transmembrane receptors (Gilman, *Annu. Rev. Biochem.* (1987) *56*:615). The alpha subunit binds to and hydrolyzes GTP; the functions of the beta and gamma subunits are less clear but they seem to be required for the replacement of GDP by GTP as well as for membrane anchoring and receptor recognition. In higher eukaryotes, G-beta exists as a small multigene family of highly conserved proteins of about 340 amino acid residues. Structurally, G-beta consists of eight tandem repeats of about 40 residues, each containing a central Trp-Asp motif (this type of repeat is sometimes called a WD-40 repeat). The consensus pattern for the WD domain/G-Beta repeat family is: [LIVMSTAC]-

[LIVMFYWSTAGC]-[LIMSTAG]-[LIVMSTAGC]-x(2)-[DN]-x(2)-[LIVMWSTAC]-x-[LIVMFSTAG]-W-[DEN]-[LIVMFSTAGCN].

Zinc Finger, C2H2 Type (Zincfing_C2H2; Pfam Accession No. PF00096). SEQ ID NO:779 corresponds to a polynucleotid encoding a member of the C2H2 type zinc finger protein family, which contain zinc finger domains that facilitate nucleic acid binding (Klug *et al.*, *Trends Biochem. Sci.* (1987) *12*:464; Evans *et al.*, *Cell* (1988) *52*:1; Payre *et al.*, *FEBS Lett.* (1988) *234*:245; Miller *et al.*, *EMBO J.* (1985) *4*:1609; and Berg, *Proc. Natl. Acad. Sci. USA* (1988) *85*:99).

In addition to the conserved zinc ligand residues, a number of other positions are also important for the structural integrity of the C2H2 zinc fingers. (Rosenfeld *et al.*, *J. Biomol. Struct. Dyn.* (1993) *11*:557) The best conserved position, which is generally an aromatic or aliphatic residue, is located four residues after the second cysteine. The consensus pattern for C2H2 zinc fingers is: C-x(2,4)-C-x(3)-[LIVMFYWC]-x(8)-H-x(3,5)-H. The two C's and two H's are zinc ligands.

Example 4: Differential Expression of Polynucleotides of the Invention: Description of Libraries and Detection of Differential Expression

The relative expression levels of the polynucleotides of the invention was assessed in several libraries prepared from various sources, including cell lines and patient tissue samples. Table 4 provides a summary of these libraries, including the shortened library name (used hereafter), the mRNA source used to prepared the cDNA library, and the approximate number of clones in the library.

Table 4. Description of cDNA Libraries

Library (Lib#)	Description	**Number of Clones in Library**
1	Human Colon Cell Line Km12 L4: High Metastatic Potential (derived from Km12C)	308731
2	Human Colon Cell Line Km12C: Low Metastatic Potential	284771
3	Human Breast Cancer Cell Line MDA-MB-231: High Metastatic Potential; micro-mets in lung	326937
4	Human Breast Cancer Cell Line MCF7: Non Metastatic	318979
8	Human Lung Cancer Cell Line MV-522: High Metastatic Potential	223620
9	Human Lung Cancer Cell Line UCP-3: Low Metastatic Potential	312503
12	Human microvascular endothelial cells (HMVEC) - UNTREATED (PCR (OligodT) cDNA library)	41938
13	Human microvascular endothelial cells (HMVEC) – bFGF TREATED (PCR (OligodT) cDNA library)	42100
14	Human microvascular endothelial cells (HMVEC) – VEGF TREATED (PCR (OligodT) cDNA library)	42825

Library (Lib#)	Description	Number of Clones in Library
15	Normal Colon - UC#2 Patient (MICRODISSECTED PCR (OligodT) cDNA library)	282722
16	Colon Tumor - UC#2 Patient (MICRODISSECTED PCR (OligodT) cDNA library)	298831
17	Liver Metastasis from Colon Tumor of UC#2 Patient (MICRODISSECTED PCR (OligodT) cDNA library)	303467
18	Normal Colon - UC#3 Patient (MICRODISSECTED PCR (OligodT) cDNA library)	36216
19	Colon Tumor - UC#3 Patient (MICRODISSECTED PCR (OligodT) cDNA library)	41388
20	Liver Metastasis from Colon Tumor of UC#3 Patient (MICRODISSECTED PCR (OligodT) cDNA library)	30956
21	GRRpz Cells derived from normal prostate epithelium	164801
22	WOca Cells derived from Gleason Grade 4 prostate cancer epithelium	162088
23	Normal Lung Epithelium of Patient #1006 (MICRODISSECTED PCR (OligodT) cDNA library)	306198
24	Primary tumor, Large Cell Carcinoma of Patient #1006 (MICRODISSECTED PCR (OligodT) cDNA library)	309349

The KM12L4 cell line (Morikawa, et al., *Cancer Research* (1988) *48*:6863)is derived from the KM12C cell line (Morikawa et al. *Cancer Res.* (1988) *48*:1943-1948),. The KM12C cell line, which is poorly metastatic (low metastatic) was established in culture from a Dukes' stage B_2 surgical specimen (Morikawa *et al. Cancer Res.* (1988) *48*:6863). The KM12L4-A is a highly metastatic subline derived from KM12C (Yeatman *et al. Nucl. Acids. Res.* (1995) *23*:4007; Bao-Ling *et al. Proc. Annu. Meet. Am. Assoc. Cancer. Res.* (1995) *21*:3269). The KM12C and KM12C-derived cell lines (*e.g.*, KM12L4, KM12L4-A, *etc.*) are well-recognized in the art as a model cell line for the study of colon cancer (see, *e.g.*, Moriakawa *et al.*, *supra*; Radinsky *et al. Clin. Cancer Res.* (1995) *1*:19; Yeatman *et al.*, (1995) *supra*; Yeatman *et al. Clin. Exp. Metastasis* (1996) *14*:246). The MDA-MB-231 cell line was originally isolated from pleural effusions (Cailleau, *J. Natl. Cancer. Inst.* (1974) *53*:661), is of high metastatic potential, and forms poorly differentiated adenocarcinoma grade II in nude mice consistent with breast carcinoma. The MCF7 cell line was derived from a pleural effusion of a breast adenocarcinoma and is non-metastatic. The MDA-MB-231 and MCF-7cell lines are well-recognized in the art as a models for the study of human breast cancer (see, *e.g.*, Chandrasekaran *et al.*, *Cancer Res.* (1979) *39*:870; Gastpar *et al.*, *J Med Chem* (1998) *41*:4965; Ranson *et al.*, *Br J Cancer* (1998) *77*:1586; and Kuang *et al.*, *Nucleic Acids Res* (1998) *26*:1116).

The MV-522 cell line is derived from a human lung carcinoma and is of high metastatic potential. The UCP-3 cell line is a low metastatic human lung carcinoma cell line; the MV-522 is a high

metastatic variant of UCP-3. These cell lines are well-recognized in the art as models for the study of human lung cancer (see, *e.g.*, Varki *et al.*, *Int J Cancer* (1987) *40*:46 (UCP-3); Varki *et al.*, *Tumour Biol.* (1990) *11*:327; (MV-522 and UCP-3); Varki *et al.*, *Anticancer Res.* (1990) *10*:637; (MV-522); Kelner *et al.*, *Anticancer Res* (1995) *15*:867 (MV-522); and Zhang *et al.*, *Anticancer Drugs* (1997) *8*:696 (MV522)). The samples of libraries 15-20 are derived from two different patients (UC#2, and UC#3). The bFGF-treated HMVEC were prepared by incubation with bFGF at 10ng/ml for 2 hrs; the VEGF-treated HMVEC were prepared by incubation with 20ng/ml VEGF for 2 hrs. Following incubation with the respective growth factor, the cells were washed and lysis buffer added for RNA preparation. The GRRpz and WOca cell lines were provided by Dr. Donna M. Peehl, Department of Medicine, Stanford University School of Medicine. GRRpz was derived from normal prostate epithelium. The WOca cell line is a Gleason Grade 4 cell line.

Each of the libraries is composed of a collection of cDNA clones that in turn are representative of the mRNAs expressed in the indicated mRNA source. In order to facilitate the analysis of the millions of sequences in each library, the sequences were assigned to clusters. The concept of "cluster of clones" is derived from a sorting/grouping of cDNA clones based on their hybridization pattern to a panel of roughly 300 7bp oligonucleotide probes (see Drmanac *et al.*, *Genomics* (1996) *37*(1):29). Random cDNA clones from a tissue library are hybridized at moderate stringency to 300 7bp oligonucleotides. Each oligonucleotide has some measure of specific hybridization to that specific clone. The combination of 300 of these measures of hybridization for 300 probes equals the "hybridization signature" for a specific clone. Clones with similar sequence will have similar hybridization signatures. By developing a sorting/grouping algorithm to analyze these signatures, groups of clones in a library can be identified and brought together computationally. These groups of clones are termed "clusters". Depending on the stringency of the selection in the algorithm (similar to the stringency of hybridization in a classic library cDNA screening protocol), the "purity" of each cluster can be controlled. For example, artifacts of clustering may occur in computational clustering just as artifacts can occur in "wet-lab" screening of a cDNA library with 400 bp cDNA fragments, at even the highest stringency. The stringency used in the implementation of cluster herein provides groups of clones that are in general from the same cDNA or closely related cDNAs. Closely related clones can be a result of different length clones of the same cDNA, closely related clones from highly related gene families, or splice variants of the same cDNA.

Differential expression for a selected cluster was assessed by first determining the number of cDNA clones corresponding to the selected cluster in the first library (Clones in 1st), and the determining the number of cDNA clones corresponding to the selected cluster in the second library (Clones in 2nd). Differential expression of the selected cluster in the first library relative to the second library is expressed as a "ratio" of percent expression between the two libraries. In general, the "ratio" is

calculated by: 1) calculating the percent expression of the selected cluster in the first library by dividing the number of clones corresponding to a selected cluster in the first library by the total number of clones analyzed from the first library; 2) calculating the percent expression of the selected cluster in the second library by dividing the number of clones corresponding to a selected cluster in a second library by the total number of clones analyzed from the second library; 3) dividing the calculated percent expression from the first library by the calculated percent expression from the second library. If the "number of clones" corresponding to a selected cluster in a library is zero, the value is set at 1 to aid in calculation. The formula used in calculating the ratio takes into account the "depth" of each of the libraries being compared, *i.e.*, the total number of clones analyzed in each library.

In general, a polynucleotide is said to be significantly differentially expressed between two samples when the ratio value is greater than at least about 2, preferably greater than at least about 3, more preferably greater than at least about 5, where the ratio value is calculated using the method described above. The significance of differential expression is determined using a z score test (Zar, Biostatistical Analysis, Prentice Hall, Inc., USA, "Differences between Proportions," pp 296-298 (1974).

Example 5: Differential Expression of Genes Corresponding to Polynucleotides of the Invention

A number of polynucleotide sequences have been identified that are differentially expressed between, for example, cells derived from high metastatic potential cancer tissue and low metastatic cancer cells, and between cells derived from metastatic cancer tissue and normal tissue. Evaluation of the levels of expression of the genes corresponding to these sequences can be valuable in diagnosis, prognosis, and/or treatment (*e.g.*, to facilitate rationale design of therapy, monitoring during and after therapy, *etc.*). Moreover, the genes corresponding to differentially expressed sequences described herein can be therapeutic targets due to their involvement in regulation (*e.g.*, inhibition or promotion) of development of, for example, the metastatic phenotype. For example, sequences that correspond to genes that are increased in expression in high metastatic potential cells relative to normal or non-metastatic tumor cells may encode genes or regulatory sequences involved in processes such as angiogenesis, differentiation, cell replication, and metastasis.

Detection of the relative expression levels of differentially expressed polynucleotides described herein can provide valuable information to guide the clinician in the choice of therapy. For example, a patient sample exhibiting an expression level of one or more of these polynucleotides that corresponds to a gene that is increased in expression in metastatic or high metastatic potential cells may warrant more aggressive treatment for the patient. In contrast, detection of expression levels of a polynucleotide

sequence that corresponds to expression levels associated with that of low metastatic potential cells may warrant a more positive prognosis than the gross pathology would suggest.

The differential expression of the polynucleotides described herein can thus be used as, for example, diagnostic markers, prognostic markers, for risk assessment, patient treatment and the like. These polynucleotide sequences can also be used in combination with other known molecular and/or biochemical markers. The following examples provide relative expression levels of polynucleotides from specified cell lines and patient tissue samples.

The differential expression data for polynucleotides of the invention that have been identified as being differentially expressed across various combinations of the libraries described above is summarized in Table 5 (inserted prior to the claims). Table 5 provides: 1) the Sequence Identification Number ("SEQ") assigned to the polynucleotide; 2) the cluster ("CLST") to which the polynucleotide has been assigned as described above; 3) the library comparisons that resulted in identifcation of the polynucleotide as being differentially expressed ("Library Pair A,B"), with shorthand names of the compared libraries provided in parentheses following the library numbers;, 4) the number of clones corresponding to the polynucleotide in the first library listed ("A"); 5) the number of clones corresponding to the polynucleotide in the second library listed ("B"); 6) the "A/B" where the comparison resulted in a finding that the number of clones in library A is greater than the number of clones in library B; and 7) the "B/A" where the comparison resulted in a finding that the number of clones in library B is greater than the number of clones in library A.

Example 6: Source of Biological Materials for Microarray-Based Experiments

The biological materials used in the experiments described in the subsequent examples relating to microarry data are described below.

Source of patient tissue samples

Normal and cancerous tissues were collected from patients using laser capture microdissection (LCM) techniques, which techniques are well known in the art (see, *e.g.*, Ohyama *et al.* (2000) *Biotechniques* 29:530-6; Curran *et al.* (2000) *Mol. Pathol.* 53:64-8; Suarez-Quian *et al.* (1999) *Biotechniques* 26:328-35; Simone *et al.* (1998) *Trends Genet* 14:272-6; Conia *et al.* (1997) *J. Clin. Lab. Anal.* 11:28-38; Emmert-Buck *et al.* (1996) *Science* 274:998-1001). Table 9 (inserted following the last page of the Examples) provides information about each patient from which the samples were isolated, including: the Patient ID and Path ReportID, numbers assigned to the patient and the pathology reports for identification purposes; the anatomical location of the tumor (AnatomicalLoc); The Primary Tumor Size; the Primary Tumor Grade; the Histopathologic Grade; a description of local sites to which the tumor had invaded (Local Invasion); the presence of lymph node metastases (Lymph Node

Metastasis); incidence of lymph node metastases (provided as number of lymph nodes positive for metastasis over the number of lymph nodes examined) (Incidence Lymphnode Metastasis); the Regional Lymphnode Grade; the identification or detection of metastases to sites distant to the tumor and their location (Distant Met & Loc);a description of the distant metastases (Description Distant Met); the grade of distant metastasis (Distant Met Grade); and general comments about the patient or the tumor (Comments). Adenoma was not described in any of the patients; adenoma dysplasia (described as hyperplasia by the pathologist) was described in Patient ID No. 695. Extranodal extensions were described in two patients, Patient ID Nos. 784 and 791. Lymphovascular invasion was described in seven patients, Patient ID Nos. 128, 278, 517, 534, 784, 786, and 791.. Crohn's-like infiltrates were described in seven patients, Patient ID Nos. 52, 264, 268, 392, 393, 784, and 791.

Polynucleotides on arrays

Polynucleotides spotted on the arrays were generated by PCR amplification of clones derived from cDNA libraries. The clones used for amplification were either the clones from which the sequences described herein (SEQ ID NOS:1-2396) were derived, or are clones having inserts with significant polynucleotide sequence overlap wih the sequences described herein (SEQ ID NO:1-2396) as determined by BLAST2 homology searching.

Example 7: Microarray Design

Each array used in the examples below had an identical spatial layout and control spot set. Each microarray was divided into two areas, each area having an array with, on each half, twelve groupings of 32 x 12 spots for a total of about 9,216 spots on each array. The two areas are spotted identically which provide for at least two duplicates of each clone per array. Spotting was accomplished using PCR amplified products from 0.5kb to 2.0 kb and spotted using a Molecular Dynamics Gen III spotter according to the manufacturer's recommendations. The first row of each of the 24 regions on the array had about 32 control spots, including 4 negative control spots and 8 test polynucleotides.

The test polynucleotides were spiked into each sample before the labeling reaction with a range of concentrations from 2-600 pg/slide and ratios of 1:1 . For each array design, two slides were hybridized with the test samples reverse-labeled in the labeling reaction. This provided for about 4 duplicate measurements for each clone, two of one color and two of the other, for each sample.

Example 8: Identification Of Differentially Expressed Genes

cDNA probes were prepared from total RNA isolated from the patient cells described in Example 6. Since LCM provides for the isolation of specific cell types to provide a substantially homogenous cell sample, this provided for a similarly pure RNA sample.

Total RNA was first reverse transcribed into cDNA using a primer containing a T7 RNA polymerase promoter, followed by second strand DNA synthesis. cDNA was then transcribed *in vitro* to produce antisense RNA using the T7 promoter-mediated expression (see, *e.g.*, Luo *et al.* (1999) *Nature Med* 5:117-122), and the antisense RNA was then converted into cDNA. The second set of cDNAs were again transcribed *in vitro*, using the T7 promoter, to provide antisense RNA. Optionally, the RNA was again converted into cDNA, allowing for up to a third round of T7-mediated amplification to produce more antisense RNA. Thus the procedure provided for two or three rounds of *in vitro* transcription to produce the final RNA used for fluorescent labeling. Fluorescent probes were generated by first adding control RNA to the antisense RNA mix, and producing fluorescently labeled cDNA from the RNA starting material. Fluorescently labeled cDNAs prepared from the tumor RNA sample were compared to fluorescently labeled cDNAs prepared from normal cell RNA sample. For example, the cDNA probes from the normal cells were labeled with Cy3 fluorescent dye (green) and the cDNA probes prepared from the tumor cells were labeled with Cy5 fluorescent dye (red).

The differential expression assay was performed by mixing equal amounts of probes from tumor cells and normal cells of the same patient. The arrays were prehybridized by incubation for about 2 hrs at 60°C in 5X SSC/0.2% SDS/1 mM EDTA, and then washed three times in water and twice in isopropanol. Following prehybridization of the array, the probe mixture was then hybridized to the array under conditions of high stringency (overnight at 42°C in 50% formamide, 5X SSC, and 0.2% SDS. After hybridization, the array was washed at 55°C three times as follows: 1) first wash in 1X SSC/0.2% SDS; 2) second wash in 0.1X SSC/0.2% SDS; and 3) third wash in 0.1X SSC.

The arrays were then scanned for green and red fluorescence using a Molecular Dynamics Generation III dual color laser-scanner/detector. The images were processed using BioDiscovery Autogene software, and the data from each scan set normalized to provide for a ratio of expression relative to normal. Data from the microarray experiments was analyzed according to the algorithms described in U.S. application serial no. 60/252,358, filed November 20, 2000, by E.J. Moler, M.A. Boyle, and F.M. Randazzo, and entitled "Precision and accuracy in cDNA microarray data," which application is specifically incorporated herein by reference.

The experiment was repeated, this time labeling the two probes with the opposite color in order to perform the assay in both "color directions." Each experiment was sometimes repeated with two more slides (one in each color direction). The level fluorescence for each sequence on the array expressed as a ratio of the geometric mean of 8 replicate spots/genes from the four arrays or 4 replicate spots/gene from 2 arrays or some other permutation. The data were normalized using the spiked positive controls present in each duplicated area, and the precision of this normalization was included in the final determination of the significance of each differential. The fluorescent intensity of each spot was also compared to the

negative controls in each duplicated area to determine which spots have detected significant expression levels in each sample.

A statistical analysis of the fluorescent intensities was applied to each set of duplicate spots to assess the precision and significance of each differential measurement, resulting in a p-value testing the null hypothesis that there is no differential in the expression level between the tumor and normal samples of each patient. During initial analysis of the microarrays, the hypothesis was accepted if $p>10^{-3}$, and the differential ratio was set to 1.000 for those spots. All other spots have a significant difference in expression between the tumor and normal sample. If the tumor sample has detectable expression and the normal does not, the ratio is truncated at 1000 since the value for expression in the normal sample would be zero, and the ratio would not be a mathematically useful value (e.g., infinity). If the normal sample has detectable expression and the tumor does not, the ratio is truncated to 0.001, since the value for expression in the tumor sample would be zero and the ratio would not be a mathematically useful value. These latter two situations are referred to herein as "on/off." Database tables were populated using a 95% confidence level ($p>0.05$).

Tables 10-14:clf summarizes the results of the differential expression analysis, where the difference in the expression level in the colon tumor cell relative to the matched normal colon cells is greater than or equal to 2 fold (">=2x"), 2.5 fold (">=2.5x"), or 5 fold (">=5x") in at least 20% or more of the patients analyzed. Each table provides: the SEQ ID NO; the percentage of patients tested having a colon tumor that exhibited at least 2 fold (">=2x"), 2.5 fold (">=2.5x"), or 5 fold (">=5x") increase in expression levels of the indicated gene relative to matched normal colon tissue; and the ratio data for each patient sample tested (columns headed by "P#," indicating the Patient Identification Number, e.g., "P15" indicates the ration data for patient 15).

In general, a polynucleotide is said to represent a significantly differentially expressed gene between two samples when there is detectable levels of expression in at least one sample and the ratio value is greater than at least about 1.2 fold, preferably greater than at least about 1.5 fold, more preferably greater than at least about 2 fold, where the ratio value is calculated using the method described above.

A differential expression ratio of 1 indicates that the expression level of the gene in the tumor cell was not statistically different from expression of that gene in normal colon cells of the same patient. A differential expression ratio significantly greater than 1 in cancerous colon cells relative to normal colon cells indicates that the gene is increased in expression in cancerous cells relative to normal cells, indicating that the gene plays a role in the development of the cancerous phenotype, and may be involved in promoting metastasis of the cell. Detection of gene products from such genes can provide an indicator that the cell is cancerous, and may provide a therapeutic and/or diagnostic target.

Likewise, a differential expression ratio significantly less than 1 in cancerous colon cells relative to normal colon cells indicates that, for example, the gene is involved in suppression of the cancerous phenotype. Increasing activity of the gene product encoded by such a gene, or replacing such activity, can provide the basis for chemotherapy. Such gene can also serve as markers of cancerous cells, *e.g.*, the absence or decreased presence of the gene product in a colon cell relative to a normal colon cell indicates that the cell may be cancerous.

Example 9: Functional Analysis Of Gene Products Differentially Expressed In Cancer In Patients

The gene products of genes differentially expressed in cancerous cells are further analyzed to confirm the role and function of the gene product in tumorgenesis, *e.g.*, in promoting or inhibiting development of a metastatic phenotype.

Blocking expression of gene products using antisense

The effect of single genes upon development of cancer is assessed through use of antisense oligonucleotides specific for sequences corresponding to a selected sequence. Antisense oligonucleotides are prepared based upon a selected sequence that corresponds to a gene of interest. The antisense oligonucleotide is introduced into a test cell and the effect upon expression of the corresponding gene, as well as the effect upon a phenotype of interest assessed (*e.g.*, a normal cell is examined for induction of the cancerous phenotype, or a cancerous cell is examined for suppression of a cancerous phenotype (*e.g.*, suppression of metastasis)).

Blocking function of gene products using gene product-specific antibodies and/or small molecule inhibitors

The function of gene products corresponding to genes/clusters identified herein can be assessed by blocking function of the gene products in the cell. For example, where the gene product is secreted, blocking antibodies can generated and added to cells to examine the effect upon the cell phenotype in the context of, for example, the transformation of the cell to a cancerous, particularly a metastatic, phenotype. In order to generate antibodies, a clone corresponding to a selected gene product/cluster is selected, and a sequence that represents a partial or complete coding sequence is obtained. The resulting clone is then expressed, the polypeptide produced isolated, and antibodies generated. The antibodies are then combined with cells and the effect upon tumorigenesis assessed.

Where the gene product of the gene/clusters identified herein exhibits sequence homology to a protein of known function (*e.g.*, to a specific kinase or protease) and/or to a protein family of known function (*e.g.*, contains a domain or other consensus sequence present in a protease family or in a kinase family), then the role of the gene product in tumorigenesis, as well as the activity of the gene product, can

be examined using small molecule that inhibit or enhance function of the corresponding protein or protein family.

Those skilled in the art will recognize, or be able to ascertain, using not more than routine experimentation, many equivalents to the specific embodiments of the invention described herein. Such specific embodiments and equivalents are intended to be encompassed by the following claims.

All publications and patent applications cited in this specification are herein incorporated by reference as if each individual publication or patent application were specifically and individually indicated to be incorporated by reference. The citation of any publication is for its disclosure prior to the filing date and should not be construed as an admission that the present invention is not entitled to antedate such publication by virtue of prior invention.

Although the foregoing invention has been described in some detail by way of illustration and example for purposes of clarity of understanding, it is readily apparent to those of ordinary skill in the art in light of the teachings of this invention that certain changes and modifications may be made thereto without departing from the spirit or scope of the appended claims.

Deposit Information. The following materials were deposited with the American Type Culture Collection (CMCC = Chiron Master Culture Collection).

Table 6. Cell Lines Deposited with ATCC

Cell Line	Deposit Date	ATCC Accession No.	CMCC Accession No.
KM12L4	March 19, 1998	CRL-12496	11606
Km12C	May 15, 1998	CRL-12533	11611
MDA-MB-231	May 15, 1998	CRL-12532	10583
MCF-7	October 9, 1998	CRL-12584	10377

In addition, pools of selected clones, as well as libraries containing specific clones, were assigned an "ES" number (internal reference) and deposited with the ATCC. Table 7 (inserted before the claims) provides the ATCC Accession Nos. and internal references (CMCC Nos.) of the ES deposits, all of which were deposited on or before the filing date of the present application. The names of the clones contained within each of these deposits are provided in Table 8 (inserted before the claims).

The above material has been deposited with the American Type Culture Collection, Rockville, Maryland, under the accession number indicated. These deposits will be maintained under the terms of the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure. The deposit will be maintained for a period of at least 30 years following

issuance of this patent, or for the enforceable life of the patent, whichever is greater. Upon the granting of a patent, all restrictions on the availability to the public of the deposited material will be irrevocably removed.

The deposits described herein are provided merely as convenience to those of skill in the art, and is not an admission that a deposit is required under 35 U.S.C. §112. The sequence of the polynucleotides contained within the deposited material, as well as the amino acid sequence of the polypeptides encoded thereby, are incorporated herein by reference and are controlling in the event of any conflict with the written description of sequences herein. A license may be required to make, use, or sell the deposited material, and no such license is granted hereby.

Retrieval of Individual Clones from Deposit of Pooled Clones. Where the ATCC deposit is composed of a pool of cDNA clones or a library of cDNA clones, the deposit was prepared by first transfecting each of the clones into separate bacterial cells. The clones in the pool or library were then deposited as a pool of equal mixtures in the composite deposit. Particular clones can be obtained from the composite deposit using methods well known in the art. For example, a bacterial cell containing a particular clone can be identified by isolating single colonies, and identifying colonies containing the specific clone through standard colony hybridization techniques, using an oligonucleotide probe or probes designed to specifically hybridize to a sequence of the clone insert (*e.g.*, a probe based upon unmasked sequence of the encoded polynucleotide having the indicated SEQ *ID* NO). The probe should be designed to have a T_m of approximately 80°C (assuming 2°C for each A or T and 4°C for each G or C). Positive colonies can then be picked, grown in culture, and the recombinant clone isolated. Alternatively, probes designed in this manner can be used to PCR to isolate a nucleic acid molecule from the pooled clones according to methods well known in the art, *e.g.*, by purifying the cDNA from the deposited culture pool, and using the probes in PCR reactions to produce an amplified product having the corresponding desired polynucleotide sequence.

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
1	734646	RTA22200010F.k.10.1.P.Seq	F	M00056481:62	CH16COP
2	400221	RTA22200001F.a.17.1.P.Seq	F	M00042528:611	CH15CON
3	205329	RTA22200006F.d.09.2.P.Seq	F	M00056020:410	CH15CON
4	446680	RTA22200001F.f.07.1.P.Seq	F	M00042693:54	CH15CON
5	1261	RTA22200021F.j.18.3.P.Seq	F	M00054812:15	CH17COHLV
6	400258	RTA22200011F.k.23.1.P.Seq	F	M00056617:86	CH16COP
7	450559	RTA22200005F.e.21.1.P.Seq	F	M00055882:16	CH15CON
8	450959	RTA22200012F.e.11.1.P.Seq	F	M00056703:46	CH16COP
9	451794	RTA22200007F.l.16.1.P.Seq	F	M00056247:76	CH15CON
10	415058	RTA22200020F.d.11.1.P.Seq	F	M00054591:87	CH17COHLV
11	31506	RTA22200012F.b.08.1.P.Seq	F	M00056670:111	CH16COP
12	417155	RTA22200002F.f.10.1.P.Seq	F	M00055466:28	CH15CON
13	448925	RTA22200019F.e.21.1.P.Seq	F	M00043507:45	CH17COHLV
14	11329	RTA22200006F.d.10.2.P.Seq	F	M00056020:47	CH15CON
15	650422	RTA22200001F.n.14.1.P.Seq	F	M00042911:83	CH15CON
16	6863	RTA22200229F.f.13.1.P.Seq	F	M00006967:25	CH02COH
17	449690	RTA22200002F.g.18.1.P.Seq	F	M00055495:45	CH15CON
18	724616	RTA22200016F.j.23.1.P.Seq	F	M00057236:86	CH16COP
19	549722	RTA22200025F.m.01.2.P.Seq	F	M00055383:24	CH17COHLV
20	549722	RTA22200025F.l.24.1.P.Seq	F	M00055383:24	CH17COHLV
21	448110	RTA22200018F.m.04.1.P.Seq	F	M00043354:31	CH17COHLV
22	515631	RTA22200010F.j.14.1.P.Seq	F	M00056434:38	CH16COP
23	11881	RTA22200233F.k.04.1.P.Seq	F	M00008099:78	CH03MAH
24	650856	RTA22200012F.n.24.1.P.Seq	F	M00056772:14	CH16COP
25	449701	RTA22200012F.f.21.1.P.Seq	F	M00056710:89	CH16COP
26	651073	RTA22200007F.l.06.1.P.Seq	F	M00056243:710	CH15CON
27	10340	RTA22200234F.b.07.1.P.Seq	F	M00022189:23	CH03MAH
28	648310	RTA22200007F.m.04.1.P.Seq	F	M00056252:88	CH15CON
29	730336	RTA22200013F.l.02.1.P.Seq	F	M00056879:811	CH16COP
30	3060	RTA22200018F.b.10.1.P.Seq	F	M00042444:88	CH17COHLV
31	453016	RTA22200010F.l.06.1.P.Seq	F	M00056485:212	CH16COP
32	508931	RTA22200024F.i.13.1.P.Seq	F	M00055209:410	CH17COHLV
33	185461	RTA22200242F.b.06.1.P.Seq	F	M00026975:23	CH04MAL
34	452530	RTA22200015F.n.11.1.P.Seq	F	M00057131:21	CH16COP
35	448925	RTA22200026F.d.02.1.P.Seq	F	M00055419:71	CH17COHLV
36	1013	RTA22200005F.m.06.1.P.Seq	F	M00055945:811	CH15CON
37	6545	RTA22200241F.d.23.1.P.Seq	F	M00026879:410	CH04MAL
38	449891	RTA22200001F.b.23.1.P.Seq	F	M00042540:85	CH15CON
39	4045	RTA22200227F.n.06.1.P.Seq	F	M00006740:71	CH02COH
40	404475	RTA22200002F.b.23.1.P.Seq	F	M00055438:810	CH15CON
41	650297	RTA22200001F.n.10.1.P.Seq	F	M00042909:74	CH15CON
42	650493	RTA22200005F.n.03.1.P.Seq	F	M00055959:112	CH15CON
43	644884	RTA22200007F.k.04.1.P.Seq	F	M00056232:712	CH15CON
44	452212	RTA22200021F.k.21.3.P.Seq	F	M00054821:311	CH17COHLV
45	402727	RTA22200010F.n.09.1.P.Seq	F	M00056505:82	CH16COP

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
46	645194	RTA22200003F.m.24.1.P.Seq	F	M00055709:79	CH15CON
47	447501	RTA22200013F.f.14.1.P.Seq	F	M00056839:72	CH16COP
48	556326	RTA22200003F.o.06.1.P.Seq	F	M00055723:28	CH15CON
49	447035	RTA22200001F.e.15.1.P.Seq	F	M00042570:82	CH15CON
50	2551	RTA22200012F.o.07.1.P.Seq	F	M00056774:12	CH16COP
51	736154	RTA22200010F.i.17.1.P.Seq	F	M00056424:110	CH16COP
52	452028	RTA22200018F.k.24.1.P.Seq	F	M00043345:33	CH17COHLV
53	447441	RTA22200001F.m.13.1.P.Seq	F	M00042902:34	CH15CON
54	11028	RTA22200230F.g.12.1.P.Seq	F	M00007151:211	CH02COH
55	640974	RTA22200002F.b.07.1.P.Seq	F	M00055429:85	CH15CON
56	555103	RTA22200022F.m.11.1.P.Seq	F	M00054973:110	CH17COHLV
57	446789	RTA22200001F.c.12.1.P.Seq	F	M00042547:62	CH15CON
58	644884	RTA22200007F.k.04.2.P.Seq	F	M00056232:712	CH15CON
59	9029	RTA22200222F.g.08.1.P.Seq	F	M00003792:111	CH01COH
60	419255	RTA22200007F.l.14.2.P.Seq	F	M00056246:77	CH15CON
61	4309	RTA22200225F.j.15.1.P.Seq	F	M00005491:23	CH02COH
62	554069	RTA22200022F.p.16.1.P.Seq	F	M00055008:28	CH17COHLV
63	4330	RTA22200227F.i.16.1.P.Seq	F	M00006686:27	CH02COH
64	644903	RTA22200015F.i.22.1.P.Seq	F	M00057103:511	CH16COP
65	549395	RTA22200024F.d.04.1.P.Seq	F	M00055163:32	CH17COHLV
66	4974	RTA22200225F.k.17.1.P.Seq	F	M00005500:53	CH02COH
67	447466	RTA22200006F.h.03.2.P.Seq	F	M00056053:19	CH15CON
68	645073	RTA22200004F.o.13.1.P.Seq	F	M00055829:79	CH15CON
69	447978	RTA22200025F.i.14.1.P.Seq	F	M00055361:81	CH17COHLV
70	607430	RTA22200004F.p.22.1.P.Seq	F	M00055841:45	CH15CON
71	556198	RTA22200014F.h.02.2.P.Seq	F	M00056972:65	CH16COP
72	450323	RTA22200018F.l.23.1.P.Seq	F	M00043352:59	CH17COHLV
73	21205	RTA22200249F.g.01.1.P.Seq	F	M00027660:53	CH04MAL
74	561109	RTA22200011F.m.10.1.P.Seq	F	M00056631:43	CH16COP
75	446673	RTA22200001F.a.14.1.P.Seq	F	M00042525:51	CH15CON
76	456026	RTA22200004F.m.04.1.P.Seq	F	M00055817:38	CH15CON
77	449142	RTA22200009F.c.13.2.P.Seq	F	M00042513:112	CH16COP
78	5830	RTA22200010F.c.23.1.P.Seq	F	M00056370:72	CH16COP
79	554109	RTA22200026F.g.07.1.P.Seq	F	M00055484:77	CH17COHLV
80	595506	RTA22200010F.l.16.1.P.Seq	F	M00056491:78	CH16COP
81	453981	RTA22200010F.p.11.1.P.Seq	F	M00056519:81	CH16COP
82	642461	RTA22200016F.j.11.1.P.Seq	F	M00057233:54	CH16COP
83	556198	RTA22200014F.h.02.1.P.Seq	F	M00056972:65	CH16COP
84	2082	RTA22200009F.g.21.1.P.Seq	F	M00042801:26	CH16COP
85	549435	RTA22200007F.j.06.1.P.Seq	F	M00056223:73	CH15CON
86	2286	RTA22200230F.j.03.1.P.Seq	F	M00007177:511	CH02COH
87	2737	RTA22200023F.d.17.1.P.Seq	F	M00055039:52	CH17COHLV
88	728115	RTA22200013F.f.13.1.P.Seq	F	M00056839:71	CH16COP
89	650856	RTA22200012F.o.01.1.P.Seq	F	M00056772:14	CH16COP
90	650476	RTA22200005F.g.21.1.P.Seq	F	M00055891:14	CH15CON

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
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92	733849	RTA22200011F.m.24.1.P.Seq	F	M00056638:48	CH16COP
93	447978	RTA22200009F.g.19.1.P.Seq	F	M00042800:13	CH16COP
94	729483	RTA22200012F.i.12.1.P.Seq	F	M00056728:45	CH16COP
95	12018	RTA22200249F.e.19.1.P.Seq	F	M00027641:11	CH04MAL
96	4747	RTA22200227F.d.18.1.P.Seq	F	M00006630:311	CH02COH
97	4747	RTA22200225F.a.23.1.P.Seq	F	M00005415:612	CH02COH
98	185577	RTA22200240F.i.02.1.P.Seq	F	M00023409:78	CH04MAL
99	4126	RTA22200231F.m.17.1.P.Seq	F	M00007990:43	CH03MAH
100	11456	RTA22200226F.l.08.1.P.Seq	F	M00005765:67	CH02COH
101	729851	RTA22200010F.o.03.1.P.Seq	F	M00056508:210	CH16COP
102	449849	RTA22200019F.b.07.1.P.Seq	F	M00043394:26	CH17COHLV
103	2490	RTA22200237F.e.17.1.P.Seq	F	M00022720:111	CH03MAH
104	549041	RTA22200021F.h.21.3.P.Seq	F	M00054779:67	CH17COHLV
105	11881	RTA22200237F.i.01.1.P.Seq	F	M00022750:17	CH03MAH
106	724296	RTA22200014F.o.10.1.P.Seq	F	M00057025:18	CH16COP
107	726173	RTA22200014F.o.01.1.P.Seq	F	M00057023:89	CH16COP
108	2423	RTA22200236F.h.20.1.P.Seq	F	M00022641:62	CH03MAH
109	556250	RTA22200014F.l.09.1.P.Seq	F	M00057005:31	CH16COP
110	643594	RTA22200005F.b.01.1.P.Seq	F	M00055851:612	CH15CON
111	11881	RTA22200237F.h.24.1.P.Seq	F	M00022750:17	CH03MAH
112	7436	RTA22200237F.j.11.1.P.Seq	F	M00022791:611	CH03MAH
113	2110	RTA22200235F.a.19.1.P.Seq	F	M00022415:26	CH03MAH
114	10340	RTA22200235F.e.13.1.P.Seq	F	M00022457:75	CH03MAH
115	643594	RTA22200005F.a.24.1.P.Seq	F	M00055851:612	CH15CON
116	447035	RTA22200005F.d.11.1.P.Seq	F	M00055872:412	CH15CON
117	402707	RTA22200007F.c.21.1.P.Seq	F	M00056160:18	CH15CON
118	645799	RTA22200014F.d.22.1.P.Seq	F	M00056952:84	CH16COP
119	171511	RTA22200014F.c.05.1.P.Seq	F	M00056939:22	CH16COP
120	451607	RTA22200014F.h.15.2.P.Seq	F	M00056976:610	CH16COP
121	3138	RTA22200242F.k.08.1.P.Seq	F	M00027039:59	CH04MAL
122	2988	RTA22200229F.h.11.1.P.Seq	F	M00006987:711	CH02COH
123	447326	RTA22200014F.g.22.1.P.Seq	F	M00056969:21	CH16COP
124	561734	RTA22200014F.f.10.1.P.Seq	F	M00056961:712	CH16COP
125	454999	RTA22200009F.a.13.2.P.Seq	F	M00042432:810	CH16COP
126	185652	RTA22200242F.i.12.1.P.Seq	F	M00027028:37	CH04MAL
127	6725	RTA22200232F.d.17.1.P.Seq	F	M00021947:36	CH03MAH
128	726644	RTA22200013F.i.19.1.P.Seq	F	M00056864:89	CH16COP
129	11012	RTA22200227F.n.21.1.P.Seq	F	M00006745:12	CH02COH
130	726377	RTA22200013F.i.03.1.P.Seq	F	M00056860:612	CH16COP
131	735326	RTA22200013F.l.19.1.P.Seq	F	M00056886:311	CH16COP
132	650845	RTA22200013F.l.13.1.P.Seq	F	M00056884:36	CH16COP
133	9048	RTA22200222F.l.18.1.P.Seq	F	M00004101:81	CH01COH
134	732254	RTA22200012F.b.15.1.P.Seq	F	M00056674:84	CH16COP
135	452052	RTA22200013F.i.16.1.P.Seq	F	M00056863:53	CH16COP

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
136	554079	RTA22200012F.j.17.1.P.Seq	F	M00056735:28	CH16COP
137	9049	RTA22200222F.i.05.1.P.Seq	F	M00003948:212	CH01COH
138	1307	RTA22200244F.n.16.1.P.Seq	F	M00027222:39	CH04MAL
139	139730	RTA22200242F.g.11.1.P.Seq	F	M00027016:76	CH04MAL
140	7750	RTA22200241F.f.24.1.P.Seq	F	M00026899:711	CH04MAL
141	8050	RTA22200227F.p.20.1.P.Seq	F	M00006761:49	CH02COH
142	725222	RTA22200013F.k.24.1.P.Seq	F	M00056879:55	CH16COP
143	3275	RTA22200235F.j.22.2.P.Seq	F	M00022516:59	CH03MAH
144	7424	RTA22200235F.c.12.1.P.Seq	F	M00022430:44	CH03MAH
145	8953	RTA22200241F.c.05.1.P.Seq	F	M00026866:88	CH04MAL
146	8966	RTA22200243F.c.04.1.P.Seq	F	M00027088:86	CH04MAL
147	530883	RTA22200013F.i.22.1.P.Seq	F	M00056866:55	CH16COP
148	6725	RTA22200238F.l.09.1.P.Seq	F	M00022973:78	CH03MAH
149	4439	RTA22200222F.m.24.1.P.Seq	F	M00004167:411	CH01COH
150	648472	RTA22200012F.g.07.1.P.Seq	F	M00056712:17	CH16COP
151	735346	RTA22200011F.l.03.1.P.Seq	F	M00056618:22	CH16COP
152	732121	RTA22200011F.j.05.1.P.Seq	F	M00056600:87	CH16COP
153	650337	RTA22200005F.h.15.1.P.Seq	F	M00055900:25	CH15CON
154	533588	RTA22200005F.p.05.1.P.Seq	F	M00055981:17	CH15CON
155	649667	RTA22200007F.p.20.1.P.Seq	F	M00056290:82	CH15CON
156	394436	RTA22200015F.p.07.1.P.Seq	F	M00057145:45	CH16COP
157	649354	RTA22200007F.h.13.1.P.Seq	F	M00056210:53	CH15CON
158	2022	RTA22200240F.e.10.1.P.Seq	F	M00023347:312	CH04MAL
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160	7607	RTA22200225F.m.20.1.P.Seq	F	M00005520:512	CH02COH
161	7750	RTA22200242F.f.06.1.P.Seq	F	M00027006:81	CH04MAL
162	410554	RTA22200012F.i.21.1.P.Seq	F	M00056729:812	CH16COP
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164	561734	RTA22200014F.f.10.2.P.Seq	F	M00056961:712	CH16COP
165	4420	RTA22200229F.f.02.1.P.Seq	F	M00006964:111	CH02COH
166	559663	RTA22200012F.d.17.1.P.Seq	F	M00056697:53	CH16COP
167	7082	RTA22200235F.p.01.2.P.Seq	F	M00022565:15	CH03MAH
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169	650472	RTA22200012F.j.21.1.P.Seq	F	M00056737:77	CH16COP
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172	453846	RTA22200012F.b.14.1.P.Seq	F	M00056674:55	CH16COP
173	650820	RTA22200011F.p.05.1.P.Seq	F	M00056656:83	CH16COP
174	642906	RTA22200005F.g.06.1.P.Seq	F	M00055887:36	CH15CON
175	448805	RTA22200005F.i.23.1.P.Seq	F	M00055912:35	CH15CON
176	649667	RTA22200006F.k.18.2.P.Seq	F	M00056082:66	CH15CON
177	735786	RTA22200012F.m.12.1.P.Seq	F	M00056758:35	CH16COP
178	121457	RTA22200012F.p.18.1.P.Seq	F	M00056785:68	CH16COP
179	372960	RTA22200012F.m.06.1.P.Seq	F	M00056756:28	CH16COP
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184	727181	RTA22200016F.f.18.1.P.Seq	F	M00057208:12	CH16COP
185	649259	RTA22200006F.k.06.2.P.Seq	F	M00056079:412	CH15CON
186	649717	RTA22200007F.e.08.1.P.Seq	F	M00056180:89	CH15CON
187	736860	RTA22200009F.p.24.1.P.Seq	F	M00056351:46	CH16COP
188	729175	RTA22200012F.o.05.1.P.Seq	F	M00056773:811	CH16COP
189	642906	RTA22200005F.f.14.1.P.Seq	F	M00055884:15	CH15CON
190	4420	RTA22200232F.l.13.1.P.Seq	F	M00022123:45	CH03MAH
191	2420	RTA22200226F.c.12.1.P.Seq	F	M00005619:19	CH02COH
192	648109	RTA22200015F.o.03.1.P.Seq	F	M00057135:84	CH16COP
193	2334	RTA22200011F.p.20.1.P.Seq	F	M00056661:19	CH16COP
194	639705	RTA22200003F.o.14.1.P.Seq	F	M00055724:49	CH15CON
195	551907	RTA22200003F.n.12.1.P.Seq	F	M00055717:64	CH15CON
196	561382	RTA22200003F.m.20.1.P.Seq	F	M00055706:71	CH15CON
197	595506	RTA22200022F.a.01.1.P.Seq	F	M00054866:77	CH17COHLV
198	499424	RTA22200013F.f.16.1.P.Seq	F	M00056839:61	CH16COP
199	735477	RTA22200016F.f.08.1.P.Seq	F	M00057203:56	CH16COP
200	734370	RTA22200013F.g.21.1.P.Seq	F	M00056848:37	CH16COP
201	779	RTA22200230F.c.07.1.P.Seq	F	M00007112:112	CH02COH
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203	489	RTA22200012F.m.16.1.P.Seq	F	M00056759:611	CH16COP
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205	2994	RTA22200229F.l.01.1.P.Seq	F	M00007028:34	CH02COH
206	11147	RTA22200227F.g.12.1.P.Seq	F	M00006664:29	CH02COH
207	549395	RTA22200021F.d.19.2.P.Seq	F	M00054745:13	CH17COHLV
208	559806	RTA22200022F.h.11.1.P.Seq	F	M00054937:63	CH17COHLV
209	452238	RTA22200009F.k.17.2.P.Seq	F	M00042838:511	CH16COP
210	225914	RTA22200023F.j.18.1.P.Seq	F	M00055075:85	CH17COHLV
211	463480	RTA22200022F.p.18.1.P.Seq	F	M00055008:29	CH17COHLV
212	184725	RTA22200007F.o.17.1.P.Seq	F	M00056281:54	CH15CON
213	557401	RTA22200023F.g.22.1.P.Seq	F	M00055056:26	CH17COHLV
214	455155	RTA22200003F.f.04.1.P.Seq	F	M00055633:711	CH15CON
215	551117	RTA22200023F.p.03.1.P.Seq	F	M00055131:210	CH17COHLV
216	7659	RTA22200231F.g.16.1.P.Seq	F	M00007964:71	CH03MAH
217	729295	RTA22200017F.b.14.1.P.Seq	F	M00057306:87	CH16COP
218	450429	RTA22200007F.f.20.1.P.Seq	F	M00056195:38	CH15CON
219	450148	RTA22200022F.f.21.1.P.Seq	F	M00054927:58	CH17COHLV
220	380412	RTA22200006F.c.23.2.P.Seq	F	M00056016:46	CH15CON
221	446614	RTA22200001F.e.01.1.P.Seq	F	M00042563:52	CH15CON
222	555911	RTA22200023F.f.21.1.P.Seq	F	M00055050:74	CH17COHLV
223	450828	RTA22200022F.g.23.1.P.Seq	F	M00054935:74	CH17COHLV
224	28	RTA22200006F.a.17.2.P.Seq	F	M00055999:710	CH15CON
225	446450	RTA22200001F.h.15.1.P.Seq	F	M00042717:44	CH15CON

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229	651073	RTA22200007F.l.06.2.P.Seq	F	M00056243:710	CH15CON
230	553705	RTA22200006F.a.23.2.P.Seq	F	M00056001:27	CH15CON
231	521840	RTA22200004F.j.15.1.P.Seq	F	M00055802:84	CH15CON
232	648689	RTA22200006F.o.07.2.P.Seq	F	M00056111:82	CH15CON
233	447858	RTA22200022F.d.10.1.P.Seq	F	M00054895:49	CH17COHLV
234	556198	RTA22200010F.d.10.1.P.Seq	F	M00056374:82	CH16COP
235	394436	RTA22200003F.i.09.1.P.Seq	F	M00055662:14	CH15CON
236	639651	RTA22200003F.g.12.1.P.Seq	F	M00055647:24	CH15CON
237	499424	RTA22200010F.d.18.1.P.Seq	F	M00056382:82	CH16COP
238	468109	RTA22200001F.p.12.1.P.Seq	F	M00054915:57	CH15CON
239	185701	RTA22200248F.g.23.1.P.Seq	F	M00027561:34	CH04MAL
240	451811	RTA22200006F.h.04.2.P.Seq	F	M00056053:412	CH15CON
241	730670	RTA22200009F.m.14.1.P.Seq	F	M00042850:34	CH16COP
242	172013	RTA22200021F.l.15.3.P.Seq	F	M00054826:310	CH17COHLV
243	449142	RTA22200001F.f.10.1.P.Seq	F	M00042694:52	CH15CON
244	446964	RTA22200001F.h.23.1.P.Seq	F	M00042721:77	CH15CON
245	414739	RTA22200022F.i.16.1.P.Seq	F	M00054945:77	CH17COHLV
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249	643954	RTA22200002F.d.19.1.P.Seq	F	M00055451:711	CH15CON
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253	7607	RTA22200004F.b.13.1.P.Seq	F	M00055744:69	CH15CON
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255	650053	RTA22200002F.p.11.1.P.Seq	F	M00055560:62	CH15CON
256	448511	RTA22200009F.f.03.1.P.Seq	F	M00042777:46	CH16COP
257	642142	RTA22200016F.o.20.1.P.Seq	F	M00057277:510	CH16COP
258	470462	RTA22200006F.b.14.2.P.Seq	F	M00056005:34	CH15CON
259	431601	RTA22200004F.d.07.1.P.Seq	F	M00055763:56	CH15CON
260	421431	RTA22200001F.g.16.1.P.Seq	F	M00042704:52	CH15CON
261	284586	RTA22200002F.d.17.1.P.Seq	F	M00055451:67	CH15CON
262	556198	RTA22200022F.l.06.1.P.Seq	F	M00054963:84	CH17COHLV
263	431601	RTA22200004F.j.04.1.P.Seq	F	M00055800:48	CH15CON
264	449891	RTA22200002F.n.21.1.P.Seq	F	M00055548:64	CH15CON
265	556561	RTA22200022F.p.01.1.P.Seq	F	M00054997:212	CH17COHLV
266	554188	RTA22200022F.o.20.1.P.Seq	F	M00054996:39	CH17COHLV
267	3247	RTA22200006F.a.22.2.P.Seq	F	M00056001:26	CH15CON
268	546705	RTA22200022F.k.20.1.P.Seq	F	M00054959:311	CH17COHLV
269	560984	RTA22200022F.p.02.1.P.Seq	F	M00054997:83	CH17COHLV
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274	454806	RTA22200004F.n.04.1.P.Seq	F	M00055822:84	CH15CON
275	724296	RTA22200014F.o.10.2.P.Seq	F	M00057025:18	CH16COP
276	559280	RTA22200015F.j.19.1.P.Seq	F	M00057106:26	CH16COP
277	171511	RTA22200014F.c.05.2.P.Seq	F	M00056939:22	CH16COP
278	644242	RTA22200002F.o.14.1.P.Seq	F	M00055553:84	CH15CON
279	734370	RTA22200016F.j.07.1.P.Seq	F	M00057232:46	CH16COP
280	639459	RTA22200002F.i.18.1.P.Seq	F	M00055512:76	CH15CON
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282	644611	RTA22200002F.i.10.1.P.Seq	F	M00055509:89	CH15CON
283	550038	RTA22200021F.i.16.3.P.Seq	F	M00054802:72	CH17COHLV
284	452567	RTA22200002F.j.12.1.P.Seq	F	M00055519:36	CH15CON
285	411113	RTA22200024F.f.03.1.P.Seq	F	M00055185:21	CH17COHLV
286	650749	RTA22200002F.d.18.1.P.Seq	F	M00055451:611	CH15CON
287	558899	RTA22200026F.d.12.1.P.Seq	F	M00055421:44	CH17COHLV
288	452986	RTA22200002F.a.13.1.P.Seq	F	M00055426:22	CH15CON
289	393197	RTA22200015F.k.01.1.P.Seq	F	M00057108:59	CH16COP
290	499424	RTA22200024F.e.10.1.P.Seq	F	M00055179:42	CH17COHLV
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300	559280	RTA22200024F.d.18.1.P.Seq	F	M00055170:52	CH17COHLV
301	446673	RTA22200015F.c.01.1.P.Seq	F	M00057055:78	CH16COP
302	562550	RTA22200004F.n.17.1.P.Seq	F	M00055826:64	CH15CON
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306	407077	RTA22200015F.j.22.1.P.Seq	F	M00057108:64	CH16COP
307	499424	RTA22200018F.h.13.1.P.Seq	F	M00043317:81	CH17COHLV
308	554500	RTA22200021F.o.20.2.P.Seq	F	M00054857:512	CH17COHLV
309	730143	RTA22200015F.k.14.1.P.Seq	F	M00057112:29	CH16COP
310	595506	RTA22200015F.c.21.1.P.Seq	F	M00057061:44	CH16COP
311	2334	RTA22200016F.k.13.1.P.Seq	F	M00057242:85	CH16COP
312	647444	RTA22200002F.k.22.1.P.Seq	F	M00055527:711	CH15CON
313	380291	RTA22200008F.a.03.1.P.Seq	F	M00056292:55	CH15CON
314	644849	RTA22200016F.a.22.1.P.Seq	F	M00057162:37	CH16COP
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Table 1

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318	728884	RTA22200015F.d.02.1.P.Seq	F	M00057063:38	CH16COP
319	415058	RTA22200020F.f.03.1.P.Seq	F	M00054605:41	CH17COHLV
320	553955	RTA22200020F.e.20.1.P.Seq	F	M00054602:42	CH17COHLV
321	455820	RTA22200018F.i.16.1.P.Seq	F	M00043323:44	CH17COHLV
322	549617	RTA22200020F.f.20.1.P.Seq	F	M00054611:62	CH17COHLV
323	449831	RTA22200018F.d.22.1.P.Seq	F	M00042518:16	CH17COHLV
324	451580	RTA22200018F.b.09.1.P.Seq	F	M00042444:75	CH17COHLV
325	558899	RTA22200025F.f.09.1.P.Seq	F	M00055325:212	CH17COHLV
326	562292	RTA22200025F.j.10.1.P.Seq	F	M00055368:26	CH17COHLV
327	5830	RTA22200011F.d.11.1.P.Seq	F	M00056552:110	CH16COP
328	8953	RTA22200248F.p.09.1.P.Seq	F	M00027608:87	CH04MAL
329	8012	RTA22200233F.i.02.1.P.Seq	F	M00008089:59	CH03MAH
330	185718	RTA22200250F.f.15.1.P.Seq	F	M00027829:42	CH04MAL
331	729851	RTA22200011F.b.18.1.P.Seq	F	M00056537:85	CH16COP
332	185597	RTA22200249F.a.20.1.P.Seq	F	M00027616:712	CH04MAL
333	9887	RTA22200234F.h.14.1.P.Seq	F	M00022253:53	CH03MAH
334	725825	RTA22200011F.c.16.1.P.Seq	F	M00056547:34	CH16COP
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337	8867	RTA22200234F.j.23.1.P.Seq	F	M00022280:711	CH03MAH
338	729295	RTA22200010F.m.09.1.P.Seq	F	M00056499:65	CH16COP
339	730430	RTA22200010F.h.08.1.P.Seq	F	M00056416:212	CH16COP
340	7072	RTA22200233F.h.20.1.P.Seq	F	M00008085:39	CH03MAH
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343	11131	RTA22200224F.c.08.1.P.Seq	F	M00004852:14	CH02COH
344	640116	RTA22200010F.n.01.1.P.Seq	F	M00056503:711	CH16COP
345	730282	RTA22200010F.k.18.1.P.Seq	F	M00056483:66	CH16COP
346	550571	RTA22200019F.h.11.1.P.Seq	F	M00054502:52	CH17COHLV
347	1183	RTA22200248F.c.22.1.P.Seq	F	M00027527:74	CH04MAL
348	449437	RTA22200019F.g.09.1.P.Seq	F	M00054494:51	CH17COHLV
349	8966	RTA22200242F.d.21.1.P.Seq	F	M00026994:17	CH04MAL
350	6134	RTA22200006F.p.04.2.P.Seq	F	M00056125:49	CH15CON
351	95700	RTA22200241F.f.09.1.P.Seq	F	M00026896:510	CH04MAL
352	7066	RTA22200229F.a.23.1.P.Seq	F	M00006928:14	CH02COH
353	648310	RTA22200007F.a.23.1.P.Seq	F	M00056143:59	CH15CON
354	730059	RTA22200013F.k.11.1.P.Seq	F	M00056874:45	CH16COP
355	736014	RTA22200012F.f.11.1.P.Seq	F	M00056708:411	CH16COP
356	646577	RTA22200012F.d.07.1.P.Seq	F	M00056693:38	CH16COP
357	732254	RTA22200014F.g.09.1.P.Seq	F	M00056967:57	CH16COP
358	7037	RTA22200229F.b.01.1.P.Seq	F	M00006928:41	CH02COH
359	7037	RTA22200229F.a.24.1.P.Seq	F	M00006928:41	CH02COH
360	6937	RTA22200232F.b.06.1.P.Seq	F	M00021864:57	CH03MAH

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363	2676	RTA22200227F.p.19.1.P.Seq	F	M00006761:35	CH02COH
364	639240	RTA22200007F.k.18.1.P.Seq	F	M00056238:57	CH15CON
365	650472	RTA22200012F.e.19.1.P.Seq	F	M00056705:57	CH16COP
366	727789	RTA22200012F.g.19.1.P.Seq	F	M00056715:31	CH16COP
367	2495	RTA22200238F.e.03.1.P.Seq	F	M00022895:211	CH03MAH
368	732254	RTA22200014F.g.09.2.P.Seq	F	M00056967:57	CH16COP
369	5268	RTA22200225F.m.13.1.P.Seq	F	M00005517:64	CH02COH
370	11881	RTA22200238F.e.09.1.P.Seq	F	M00022897:83	CH03MAH
371	448677	RTA22200009F.b.05.2.P.Seq	F	M00042440:55	CH16COP
372	1876	RTA22200235F.i.14.2.P.Seq	F	M00022496:64	CH03MAH
373	3441	RTA22200233F.e.23.1.P.Seq	F	M00008065:62	CH03MAH
374	726134	RTA22200011F.l.05.1.P.Seq	F	M00056618:611	CH16COP
375	9048	RTA22200222F.g.12.1.P.Seq	F	M00003804:19	CH01COH
376	26489	RTA22200242F.k.07.1.P.Seq	F	M00027039:66	CH04MAL
377	644205	RTA22200007F.c.24.1.P.Seq	F	M00056162:68	CH15CON
378	468689	RTA22200006F.f.04.2.P.Seq	F	M00056036:26	CH15CON
379	638971	RTA22200012F.k.19.1.P.Seq	F	M00056746:12	CH16COP
380	10274	RTA22200241F.l.17.1.P.Seq	F	M00026936:312	CH04MAL
381	6725	RTA22200232F.f.22.1.P.Seq	F	M00022013:85	CH03MAH
382	2488	RTA22200012F.l.21.1.P.Seq	F	M00056754:49	CH16COP
383	8366	RTA22200244F.c.08.1.P.Seq	F	M00027173:48	CH04MAL
384	502683	RTA22200007F.a.09.1.P.Seq	F	M00056139:71	CH15CON
385	450914	RTA22200012F.k.22.1.P.Seq	F	M00056747:45	CH16COP
386	21205	RTA22200243F.k.21.1.P.Seq	F	M00027140:311	CH04MAL
387	644205	RTA22200007F.d.01.1.P.Seq	F	M00056162:68	CH15CON
388	5268	RTA22200225F.m.05.1.P.Seq	F	M00005513:69	CH02COH
389	8012	RTA22200232F.n.17.1.P.Seq	F	M00022148:16	CH03MAH
390	11270	RTA22200227F.m.18.1.P.Seq	F	M00006734:18	CH02COH
391	10924	RTA22200237F.h.04.1.P.Seq	F	M00022738:46	CH03MAH
392	11619	RTA22200241F.g.14.1.P.Seq	F	M00026902:74	CH04MAL
393	3650	RTA22200236F.e.11.1.P.Seq	F	M00022617:32	CH03MAH
394	1655	RTA22200222F.e.14.1.P.Seq	F	M00001637:49	CH01COH
395	3275	RTA22200238F.b.21.1.P.Seq	F	M00022876:25	CH03MAH
396	3355	RTA22200238F.c.05.1.P.Seq	F	M00022880:79	CH03MAH
397	2078	RTA22200235F.g.18.1.P.Seq	F	M00022473:26	CH03MAH
398	4809	RTA22200222F.g.09.1.P.Seq	F	M00003794:47	CH01COH
399	6402	RTA22200236F.l.15.1.P.Seq	F	M00022660:24	CH03MAH
400	555244	RTA22200023F.e.03.1.P.Seq	F	M00055042:21	CH17COHLV
401	548965	RTA22200012F.g.16.1.P.Seq	F	M00056715:410	CH16COP
402	4747	RTA22200227F.m.12.1.P.Seq	F	M00006731:38	CH02COH
403	40208	RTA22200241F.n.21.1.P.Seq	F	M00026950:81	CH04MAL
404	14596	RTA22200241F.d.18.1.P.Seq	F	M00026879:22	CH04MAL
405	7110	RTA22200232F.n.01.1.P.Seq	F	M00022143:41	CH03MAH

Table 1

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409	2738	RTA22200232F.g.16.1.P.Seq	F	M00022050:44	CH03MAH
410	696	RTA22200232F.m.02.1.P.Seq	F	M00022132:64	CH03MAH
411	379186	RTA22200012F.c.05.1.P.Seq	F	M00056682:610	CH16COP
412	1588	RTA22200232F.o.03.1.P.Seq	F	M00022151:411	CH03MAH
413	7007	RTA22200225F.e.05.1.P.Seq	F	M00005454:33	CH02COH
414	9025	RTA22200222F.k.23.1.P.Seq	F	M00004080:15	CH01COH
415	650749	RTA22200007F.i.16.2.P.Seq	F	M00056220:49	CH15CON
416	553158	RTA22200005F.e.13.1.P.Seq	F	M00055879:511	CH15CON
417	641703	RTA22200003F.e.18.1.P.Seq	F	M00055628:18	CH15CON
418	833	RTA22200006F.j.24.2.P.Seq	F	M00056077:512	CH15CON
419	649259	RTA22200006F.o.01.2.P.Seq	F	M00056108:212	CH15CON
420	451179	RTA22200011F.i.14.1.P.Seq	F	M00056596:88	CH16COP
421	9505	RTA22200231F.b.20.1.P.Seq	F	M00007935:15	CH03MAH
422	736728	RTA22200015F.n.19.1.P.Seq	F	M00057134:31	CH16COP
423	380412	RTA22200001F.p.23.1.P.Seq	F	M00054918:43	CH15CON
424	642425	RTA22200011F.k.12.1.P.Seq	F	M00056613:15	CH16COP
425	405073	RTA22200007F.o.05.1.P.Seq	F	M00056273:11	CH15CON
426	174250	RTA22200008F.h.09.1.P.Seq	F	M00056475:61	CH15CON
427	726281	RTA22200017F.d.08.1.P.Seq	F	M00057324:412	CH16COP
428	639029	RTA22200007F.k.05.2.P.Seq	F	M00056233:63	CH15CON
429	452245	RTA22200022F.l.05.1.P.Seq	F	M00054963:811	CH17COHLV
430	510254	RTA22200005F.p.22.1.P.Seq	F	M00055992:511	CH15CON
431	642425	RTA22200007F.g.19.1.P.Seq	F	M00056204:14	CH15CON
432	51939	RTA22200005F.i.22.1.P.Seq	F	M00055912:510	CH15CON
433	7379	RTA22200228F.f.21.1.P.Seq	F	M00006821:21	CH02COH
434	546632	RTA22200013F.h.16.1.P.Seq	F	M00056858:112	CH16COP
435	734827	RTA22200011F.m.09.1.P.Seq	F	M00056631:38	CH16COP
436	2554	RTA22200231F.g.06.1.P.Seq	F	M00007961:65	CH03MAH
437	643285	RTA22200012F.a.16.1.P.Seq	F	M00056665:111	CH16COP
438	448770	RTA22200001F.o.07.1.P.Seq	F	M00054793:27	CH15CON
439	375380	RTA22200023F.e.20.1.P.Seq	F	M00055046:37	CH17COHLV
440	726134	RTA22200011F.l.10.1.P.Seq	F	M00056620:512	CH16COP
441	422687	RTA22200015F.p.03.1.P.Seq	F	M00057143:55	CH16COP
442	448436	RTA22200012F.n.02.1.P.Seq	F	M00056763:45	CH16COP
443	644893	RTA22200012F.l.24.1.P.Seq	F	M00056754:15	CH16COP
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446	724296	RTA22200012F.f.22.1.P.Seq	F	M00056710:67	CH16COP
447	735936	RTA22200009F.p.13.1.P.Seq	F	M00056346:312	CH16COP
448	556326	RTA22200023F.k.20.1.P.Seq	F	M00055085:110	CH17COHLV
449	729699	RTA22200011F.o.04.1.P.Seq	F	M00056646:32	CH16COP
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454	649852	RTA22200001F.n.24.1.P.Seq	F	M00042914:210	CH15CON
455	734063	RTA22200011F.m.16.1.P.Seq	F	M00056633:27	CH16COP
456	7279	RTA22200230F.b.22.1.P.Seq	F	M00007108:41	CH02COH
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458	649148	RTA22200006F.k.08.2.P.Seq	F	M00056079:311	CH15CON
459	1953	RTA22200226F.p.21.1.P.Seq	F	M00006576:24	CH02COH
460	650108	RTA22200006F.d.04.2.P.Seq	F	M00056018:75	CH15CON
461	515350	RTA22200005F.g.04.1.P.Seq	F	M00055886:79	CH15CON
462	402494	RTA22200013F.a.15.1.P.Seq	F	M00056796:85	CH16COP
463	649148	RTA22200013F.d.09.1.P.Seq	F	M00056821:39	CH16COP
464	833	RTA22200006F.k.01.2.P.Seq	F	M00056077:512	CH15CON
465	139730	RTA22200242F.g.02.1.P.Seq	F	M00027014:74	CH04MAL
466	453079	RTA22200009F.k.11.2.P.Seq	F	M00042835:42	CH16COP
467	546705	RTA22200003F.p.11.1.P.Seq	F	M00055729:16	CH15CON
468	644903	RTA22200003F.f.09.1.P.Seq	F	M00055635:74	CH15CON
469	732254	RTA22200013F.g.01.1.P.Seq	F	M00056842:612	CH16COP
470	561180	RTA22200003F.e.19.1.P.Seq	F	M00055630:59	CH15CON
471	732254	RTA22200013F.f.24.1.P.Seq	F	M00056842:612	CH16COP
472	449204	RTA22200009F.k.07.2.P.Seq	F	M00042834:26	CH16COP
473	185651	RTA22200242F.f.20.1.P.Seq	F	M00027013:510	CH04MAL
474	639029	RTA22200013F.l.04.1.P.Seq	F	M00056880:24	CH16COP
475	452986	RTA22200007F.f.11.1.P.Seq	F	M00056192:54	CH15CON
476	729779	RTA22200011F.i.05.1.P.Seq	F	M00056594:36	CH16COP
477	646248	RTA22200005F.o.19.1.P.Seq	F	M00055979:29	CH15CON
478	650448	RTA22200012F.a.11.1.P.Seq	F	M00056664:27	CH16COP
479	642049	RTA22200003F.o.23.1.P.Seq	F	M00055726:28	CH15CON
480	728273	RTA22200012F.f.20.1.P.Seq	F	M00056710:65	CH16COP
481	446139	RTA22200007F.l.09.2.P.Seq	F	M00056244:37	CH15CON
482	2783	RTA22200008F.f.20.1.P.Seq	F	M00056456:62	CH15CON
483	642906	RTA22200012F.n.20.1.P.Seq	F	M00056771:612	CH16COP
484	8332	RTA22200236F.j.08.1.P.Seq	F	M00022651:24	CH03MAH
485	453470	RTA22200007F.j.08.2.P.Seq	F	M00056224:58	CH15CON
486	552277	RTA22200020F.p.05.1.P.Seq	F	M00054706:39	CH17COHLV
487	464029	RTA22200001F.m.09.1.P.Seq	F	M00042901:13	CH15CON
488	547916	RTA22200008F.f.11.1.P.Seq	F	M00056448:39	CH15CON
489	649722	RTA22200006F.m.10.2.P.Seq	F	M00056094:87	CH15CON
490	612572	RTA22200007F.l.08.2.P.Seq	F	M00056244:28	CH15CON
491	385980	RTA22200012F.p.15.1.P.Seq	F	M00056784:25	CH16COP
492	141185	RTA22200007F.i.02.2.P.Seq	F	M00056215:53	CH15CON
493	463824	RTA22200006F.p.16.2.P.Seq	F	M00056133:49	CH15CON
494	446139	RTA22200007F.g.14.1.P.Seq	F	M00056201:88	CH15CON
495	725994	RTA22200011F.h.16.1.P.Seq	F	M00056591:53	CH16COP

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498	640525	RTA22200003F.m.23.1.P.Seq	F	M00055707:38	CH15CON
499	645210	RTA22200007F.m.03.1.P.Seq	F	M00056251:16	CH15CON
500	6567	RTA22200235F.p.09.2.P.Seq	F	M00022569:17	CH03MAH
501	646146	RTA22200005F.p.10.1.P.Seq	F	M00055985:41	CH15CON
502	4934	RTA22200227F.a.18.1.P.Seq	F	M00006587:18	CH02COH
503	450791	RTA22200011F.l.04.1.P.Seq	F	M00056618:66	CH16COP
504	227936	RTA22200009F.p.09.1.P.Seq	F	M00042879:69	CH16COP
505	9436	RTA22200020F.m.12.1.P.Seq	F	M00054679:412	CH17COHLV
506	2557	RTA22200226F.b.14.1.P.Seq	F	M00005610:211	CH02COH
507	11356	RTA22200228F.g.20.1.P.Seq	F	M00006831:85	CH02COH
508	7571	RTA22200226F.l.17.1.P.Seq	F	M00005769:13	CH02COH
509	558116	RTA22200007F.g.09.1.P.Seq	F	M00056199:19	CH15CON
510	216574	RTA22200012F.o.12.1.P.Seq	F	M00056775:17	CH16COP
511	455145	RTA22200005F.l.12.1.P.Seq	F	M00055936:57	CH15CON
512	649148	RTA22200007F.k.01.2.P.Seq	F	M00056231:79	CH15CON
513	648996	RTA22200007F.m.08.1.P.Seq	F	M00056253:612	CH15CON
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515	649717	RTA22200008F.g.10.1.P.Seq	F	M00056466:13	CH15CON
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517	454050	RTA22200005F.m.23.1.P.Seq	F	M00055956:52	CH15CON
518	557903	RTA22200011F.j.17.1.P.Seq	F	M00056608:54	CH16COP
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524	450953	RTA22200022F.h.12.1.P.Seq	F	M00054937:210	CH17COHLV
525	4840	RTA22200236F.i.16.1.P.Seq	F	M00022645:15	CH03MAH
526	728421	RTA22200011F.m.20.1.P.Seq	F	M00056635:111	CH16COP
527	4747	RTA22200228F.f.23.1.P.Seq	F	M00006822:19	CH02COH
528	648934	RTA22200005F.m.08.1.P.Seq	F	M00055945:510	CH15CON
529	1787	RTA22200226F.d.09.1.P.Seq	F	M00005627:210	CH02COH
530	558098	RTA22200006F.j.17.2.P.Seq	F	M00056074:710	CH15CON
531	1655	RTA22200222F.k.16.1.P.Seq	F	M00004066:42	CH01COH
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536	115762	RTA22200012F.f.06.1.P.Seq	F	M00056707:45	CH16COP
537	696	RTA22200243F.p.04.1.P.Seq	F	M00027163:411	CH04MAL
538	1948	RTA22200232F.l.23.1.P.Seq	F	M00022132:410	CH03MAH
539	696	RTA22200241F.o.01.1.P.Seq	F	M00026951:711	CH04MAL
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Table 1

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545	521840	RTA22200021F.c.20.2.P.Seq	F	M00054739:56	CH17COHLV
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547	556245	RTA22200020F.i.02.1.P.Seq	F	M00054636:12	CH17COHLV
548	449792	RTA22200001F.a.07.1.P.Seq	F	M00042345:612	CH15CON
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552	449701	RTA22200009F.h.04.1.P.Seq	F	M00042802:711	CH16COP
553	375380	RTA22200026F.e.18.1.P.Seq	F	M00055472:83	CH17COHLV
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555	549160	RTA22200021F.c.19.2.P.Seq	F	M00054739:43	CH17COHLV
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557	727331	RTA22200015F.b.19.1.P.Seq	F	M00057052:211	CH16COP
558	551502	RTA22200019F.o.20.1.P.Seq	F	M00054555:712	CH17COHLV
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568	455598	RTA22200002F.k.15.1.P.Seq	F	M00055526:69	CH15CON
569	555734	RTA22200022F.b.08.1.P.Seq	F	M00054875:34	CH17COHLV
570	446663	RTA22200001F.a.11.1.P.Seq	F	M00042523:58	CH15CON
571	449862	RTA22200024F.i.07.1.P.Seq	F	M00055207:14	CH17COHLV
572	549591	RTA22200023F.o.03.1.P.Seq	F	M00055117:33	CH17COHLV
573	553877	RTA22200021F.c.23.2.P.Seq	F	M00054740:88	CH17COHLV
574	553501	RTA22200021F.a.01.2.P.Seq	F	M00054720:412	CH17COHLV
575	1905	RTA22200020F.p.14.1.P.Seq	F	M00054713:412	CH17COHLV
576	446599	RTA22200001F.h.20.1.P.Seq	F	M00042720:46	CH15CON
577	559409	RTA22200024F.d.17.1.P.Seq	F	M00055170:61	CH17COHLV
578	551982	RTA22200026F.g.14.1.P.Seq	F	M00055485:39	CH17COHLV
579	559057	RTA22200024F.d.23.1.P.Seq	F	M00055172:44	CH17COHLV
580	446760	RTA22200001F.b.09.1.P.Seq	F	M00042536:61	CH15CON
581	551502	RTA22200020F.o.06.1.P.Seq	F	M00054694:74	CH17COHLV
582	446531	RTA22200025F.o.04.2.P.Seq	F	M00055395:32	CH17COHLV
583	506744	RTA22200021F.h.07.3.P.Seq	F	M00054772:36	CH17COHLV
584	401849	RTA22200002F.n.05.1.P.Seq	F	M00055544:22	CH15CON
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588	406413	RTA22200021F.c.09.2.P.Seq	F	M00054734:810	CH17COHLV
589	555103	RTA22200024F.a.21.1.P.Seq	F	M00055148:411	CH17COHLV
590	735292	RTA22200015F.c.13.1.P.Seq	F	M00057059:89	CH16COP
591	558534	RTA22200023F.o.13.1.P.Seq	F	M00055125:61	CH17COHLV
592	727181	RTA22200016F.k.12.1.P.Seq	F	M00057242:29	CH16COP
593	551117	RTA22200021F.f.14.3.P.Seq	F	M00054760:112	CH17COHLV
594	464040	RTA22200024F.g.21.1.P.Seq	F	M00055198:77	CH17COHLV
595	446371	RTA22200001F.h.03.1.P.Seq	F	M00042712:210	CH15CON
596	728408	RTA22200014F.p.13.3.P.Seq	F	M00057033:69	CH16COP
597	649259	RTA22200006F.n.24.2.P.Seq	F	M00056108:212	CH15CON
598	15414	RTA22200023F.n.18.1.P.Seq	F	M00055113:111	CH17COHLV
599	639240	RTA22200007F.k.18.2.P.Seq	F	M00056238:57	CH15CON
600	549722	RTA22200020F.a.09.1.P.Seq	F	M00054568:711	CH17COHLV
601	561499	RTA22200021F.b.16.2.P.Seq	F	M00054728:210	CH17COHLV
602	639029	RTA22200002F.k.07.1.P.Seq	F	M00055523:33	CH15CON
603	449512	RTA22200009F.p.02.1.P.Seq	F	M00042875:54	CH16COP
604	446987	RTA22200001F.b.20.1.P.Seq	F	M00042540:86	CH15CON
605	466302	RTA22200004F.m.18.1.P.Seq	F	M00055820:55	CH15CON
606	553802	RTA22200022F.f.04.1.P.Seq	F	M00054908:67	CH17COHLV
607	639662	RTA22200004F.h.15.1.P.Seq	F	M00055792:79	CH15CON
608	551527	RTA22200014F.k.03.2.P.Seq	F	M00056998:58	CH16COP
609	730389	RTA22200016F.b.02.1.P.Seq	F	M00057162:410	CH16COP
610	640974	RTA22200002F.n.03.1.P.Seq	F	M00055543:78	CH15CON
611	417155	RTA22200002F.o.01.1.P.Seq	F	M00055548:512	CH15CON
612	417155	RTA22200002F.n.24.1.P.Seq	F	M00055548:512	CH15CON
613	451784	RTA22200008F.d.18.1.P.Seq	F	M00056330:43	CH15CON
614	649152	RTA22200002F.f.04.1.P.Seq	F	M00055464:65	CH15CON
615	450867	RTA22200003F.d.19.1.P.Seq	F	M00055613:410	CH15CON
616	143436	RTA22200003F.d.04.1.P.Seq	F	M00055602:57	CH15CON
617	549395	RTA22200004F.o.05.1.P.Seq	F	M00055827:55	CH15CON
618	639273	RTA22200002F.h.02.1.P.Seq	F	M00055496:57	CH15CON
619	506744	RTA22200021F.m.24.2.P.Seq	F	M00054841:27	CH17COHLV
620	736595	RTA22200014F.i.22.2.P.Seq	F	M00056990:29	CH16COP
621	230995	RTA22200016F.i.10.1.P.Seq	F	M00057226:35	CH16COP
622	451784	RTA22200019F.p.21.1.P.Seq	F	M00054563:39	CH17COHLV
623	226324	RTA22200026F.n.04.1.P.Seq	F	M00054681:22	CH17COHLV
624	449617	RTA22200009F.m.12.1.P.Seq	F	M00042849:611	CH16COP
625	451092	RTA22200026F.h.02.1.P.Seq	F	M00055487:66	CH17COHLV
626	546642	RTA22200016F.o.16.1.P.Seq	F	M00057275:112	CH16COP
627	553736	RTA22200022F.j.18.1.P.Seq	F	M00054952:61	CH17COHLV
628	394413	RTA22200002F.e.15.1.P.Seq	F	M00055456:612	CH15CON
629	556326	RTA22200021F.j.24.3.P.Seq	F	M00054812:37	CH17COHLV
630	448606	RTA22200021F.d.08.2.P.Seq	F	M00054741:710	CH17COHLV

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
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633	551634	RTA22200021F.j.07.3.P.Seq	F	M00054808:68	CH17COHLV
634	556326	RTA22200021F.k.01.3.P.Seq	F	M00054812:37	CH17COHLV
635	540787	RTA22200004F.n.21.1.P.Seq	F	M00055827:42	CH15CON
636	648872	RTA22200004F.o.20.1.P.Seq	F	M00055833:111	CH15CON
637	643804	RTA22200004F.f.05.1.P.Seq	F	M00055775:36	CH15CON
638	446139	RTA22200001F.e.06.1.P.Seq	F	M00042565:18	CH15CON
639	640356	RTA22200002F.p.15.1.P.Seq	F	M00055563:12	CH15CON
640	379186	RTA22200015F.i.09.1.P.Seq	F	M00057099:38	CH16COP
641	454927	RTA22200021F.b.13.2.P.Seq	F	M00054728:58	CH17COHLV
642	401849	RTA22200004F.h.06.1.P.Seq	F	M00055790:82	CH15CON
643	452414	RTA22200004F.i.20.1.P.Seq	F	M00055798:36	CH15CON
644	446789	RTA22200004F.k.24.1.P.Seq	F	M00055807:710	CH15CON
645	189561	RTA22200022F.n.17.1.P.Seq	F	M00054985:67	CH17COHLV
646	640323	RTA22200003F.g.22.1.P.Seq	F	M00055653:84	CH15CON
647	558116	RTA22200024F.h.08.1.P.Seq	F	M00055201:27	CH17COHLV
648	468109	RTA22200004F.m.20.1.P.Seq	F	M00055820:38	CH15CON
649	481441	RTA22200003F.b.12.1.P.Seq	F	M00055583:85	CH15CON
650	449956	RTA22200018F.n.17.1.P.Seq	F	M00043365:36	CH17COHLV
651	727224	RTA22200013F.p.12.1.P.Seq	F	M00056913:710	CH16COP
652	551907	RTA22200020F.l.04.1.P.Seq	F	M00054665:88	CH17COHLV
653	447532	RTA22200004F.a.12.1.P.Seq	F	M00055736:73	CH15CON
654	447532	RTA22200003F.b.14.1.P.Seq	F	M00055584:311	CH15CON
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656	502683	RTA22200020F.j.12.1.P.Seq	F	M00054647:82	CH17COHLV
657	446909	RTA22200023F.n.17.1.P.Seq	F	M00055112:33	CH17COHLV
658	452506	RTA22200020F.c.23.1.P.Seq	F	M00054587:69	CH17COHLV
659	449792	RTA22200023F.c.02.1.P.Seq	F	M00055027:68	CH17COHLV
660	549395	RTA22200020F.i.08.1.P.Seq	F	M00054638:49	CH17COHLV
661	234653	RTA22200020F.g.14.1.P.Seq	F	M00054621:36	CH17COHLV
662	453911	RTA22200015F.f.01.1.P.Seq	F	M00057074:39	CH16COP
663	452071	RTA22200001F.a.18.1.P.Seq	F	M00042529:77	CH15CON
664	451032	RTA22200018F.g.04.1.P.Seq	F	M00043310:23	CH17COHLV
665	446680	RTA22200018F.g.17.1.P.Seq	F	M00043313:36	CH17COHLV
666	641884	RTA22200008F.b.08.1.P.Seq	F	M00056303:24	CH15CON
667	452800	RTA22200018F.e.16.1.P.Seq	F	M00043301:66	CH17COHLV
668	461835	RTA22200004F.f.08.1.P.Seq	F	M00055778:69	CH15CON
669	548965	RTA22200020F.g.08.1.P.Seq	F	M00054617:19	CH17COHLV
670	734793	RTA22200016F.c.20.1.P.Seq	F	M00057174:812	CH16COP
671	539955	RTA22200008F.a.12.1.P.Seq	F	M00056295:46	CH15CON
672	561892	RTA22200020F.f.11.1.P.Seq	F	M00054609:61	CH17COHLV
673	562292	RTA22200020F.e.06.1.P.Seq	F	M00054596:711	CH17COHLV
674	420686	RTA22200001F.j.02.1.P.Seq	F	M00042735:72	CH15CON
675	9436	RTA22200004F.f.20.1.P.Seq	F	M00055781:35	CH15CON

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678	44424	RTA22200018F.j.01.1.P.Seq	F	M00043327:82	CH17COHLV
679	394413	RTA22200001F.j.18.1.P.Seq	F	M00042742:45	CH15CON
680	449617	RTA22200008F.c.08.1.P.Seq	F	M00056312:14	CH15CON
681	455032	RTA22200018F.l.07.1.P.Seq	F	M00043347:712	CH17COHLV
682	185400	RTA22200025F.b.17.1.P.Seq	F	M00055279:512	CH17COHLV
683	453911	RTA22200015F.e.24.1.P.Seq	F	M00057074:39	CH16COP
684	650297	RTA22200004F.e.23.1.P.Seq	F	M00055774:73	CH15CON
685	185400	RTA22200018F.k.02.1.P.Seq	F	M00043338:23	CH17COHLV
686	449512	RTA22200025F.c.06.1.P.Seq	F	M00055283:82	CH17COHLV
687	44424	RTA22200018F.i.24.1.P.Seq	F	M00043327:82	CH17COHLV
688	556216	RTA22200025F.h.09.1.P.Seq	F	M00055350:61	CH17COHLV
689	448677	RTA22200025F.f.07.1.P.Seq	F	M00055324:810	CH17COHLV
690	375380	RTA22200025F.e.16.1.P.Seq	F	M00055319:11	CH17COHLV
691	379341	RTA22200018F.a.24.1.P.Seq	F	M00042442:12	CH17COHLV
692	376988	RTA22200025F.h.03.1.P.Seq	F	M00055346:42	CH17COHLV
693	559806	RTA22200025F.g.20.1.P.Seq	F	M00055344:89	CH17COHLV
694	550195	RTA22200025F.j.07.1.P.Seq	F	M00055368:310	CH17COHLV
695	562221	RTA22200025F.k.09.1.P.Seq	F	M00055374:18	CH17COHLV
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698	6751	RTA22200248F.n.24.1.P.Seq	F	M00027604:710	CH04MAL
699	11619	RTA22200250F.d.17.1.P.Seq	F	M00027806:85	CH04MAL
700	2883	RTA22200249F.l.14.1.P.Seq	F	M00027717:75	CH04MAL
701	9784	RTA22200249F.c.12.1.P.Seq	F	M00027628:11	CH04MAL
702	649722	RTA22200010F.i.15.1.P.Seq	F	M00056424:612	CH16COP
703	2888	RTA22200224F.e.01.1.P.Seq	F	M00004869:46	CH02COH
704	10340	RTA22200233F.p.01.1.P.Seq	F	M00021681:32	CH03MAH
705	1649	RTA22200234F.g.21.1.P.Seq	F	M00022246:88	CH03MAH
706	4325	RTA22200234F.i.13.1.P.Seq	F	M00022259:27	CH03MAH
707	10882	RTA22200249F.f.21.1.P.Seq	F	M00027658:73	CH04MAL
708	10342	RTA22200233F.l.20.1.P.Seq	F	M00021628:47	CH03MAH
709	6474	RTA22200224F.e.16.1.P.Seq	F	M00004972:51	CH02COH
710	10340	RTA22200233F.o.24.1.P.Seq	F	M00021681:32	CH03MAH
711	734723	RTA22200010F.k.06.1.P.Seq	F	M00056480:312	CH16COP
712	452142	RTA22200010F.i.16.1.P.Seq	F	M00056424:86	CH16COP
713	185432	RTA22200249F.o.24.1.P.Seq	F	M00027742:21	CH04MAL
714	11456	RTA22200224F.m.02.1.P.Seq	F	M00005385:110	CH02COH
715	508892	RTA22200010F.p.07.1.P.Seq	F	M00056517:73	CH16COP
716	67	RTA22200224F.f.14.1.P.Seq	F	M00005019:42	CH02COH
717	2636	RTA22200224F.m.17.1.P.Seq	F	M00005389:311	CH02COH
718	735028	RTA22200011F.e.08.1.P.Seq	F	M00056556:71	CH16COP
719	1924	RTA22200224F.n.16.1.P.Seq	F	M00005395:49	CH02COH
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723	4829	RTA22200224F.c.02.1.P.Seq	F	M00004850:75	CH02COH
724	546632	RTA22200010F.o.12.1.P.Seq	F	M00056512:36	CH16COP
725	549934	RTA22200019F.i.19.1.P.Seq	F	M00054510:89	CH17COHLV
726	649655	RTA22200010F.o.22.1.P.Seq	F	M00056514:58	CH16COP
727	62016	RTA22200019F.k.05.1.P.Seq	F	M00054520:25	CH17COHLV
728	2783	RTA22200019F.k.18.1.P.Seq	F	M00054524:22	CH17COHLV
729	3876	RTA22200019F.e.03.1.P.Seq	F	M00043504:76	CH17COHLV
730	20036	RTA22200019F.f.11.1.P.Seq	F	M00054486:211	CH17COHLV
731	644032	RTA22200013F.e.06.1.P.Seq	F	M00056824:51	CH16COP
732	451636	RTA22200018F.o.24.1.P.Seq	F	M00043374:22	CH17COHLV
733	3428	RTA22200237F.e.01.1.P.Seq	F	M00022716:36	CH03MAH
734	643954	RTA22200012F.p.22.1.P.Seq	F	M00056789:510	CH16COP
735	456506	RTA22200015F.p.23.1.P.Seq	F	M00057150:310	CH16COP
736	449269	RTA22200014F.p.17.1.P.Seq	F	M00057035:39	CH16COP
737	732712	RTA22200014F.p.03.1.P.Seq	F	M00057029:16	CH16COP
738	696	RTA22200236F.c.13.1.P.Seq	F	M00022598:512	CH03MAH
739	456528	RTA22200014F.n.13.1.P.Seq	F	M00057019:82	CH16COP
740	4043	RTA22200228F.k.21.2.P.Seq	F	M00006871:61	CH02COH
741	3639	RTA22200235F.g.13.1.P.Seq	F	M00022472:511	CH03MAH
742	1024	RTA22200244F.p.09.1.P.Seq	F	M00027229:56	CH04MAL
743	1247	RTA22200236F.i.17.1.P.Seq	F	M00022645:37	CH03MAH
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745	901	RTA22200237F.f.07.1.P.Seq	F	M00022724:44	CH03MAH
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747	725825	RTA22200014F.i.23.1.P.Seq	F	M00056990:311	CH16COP
748	456808	RTA22200014F.a.19.1.P.Seq	F	M00056924:26	CH16COP
749	729295	RTA22200014F.a.21.1.P.Seq	F	M00056925:37	CH16COP
750	551907	RTA22200005F.a.18.1.P.Seq	F	M00055850:63	CH15CON
751	551527	RTA22200014F.k.03.1.P.Seq	F	M00056998:58	CH16COP
752	7098	RTA22200237F.n.22.1.P.Seq	F	M00022831:87	CH03MAH
753	4589	RTA22200225F.k.24.1.P.Seq	F	M00005501:55	CH02COH
754	554812	RTA22200014F.g.21.1.P.Seq	F	M00056969:38	CH16COP
755	3114	RTA22200232F.g.01.1.P.Seq	F	M00022015:611	CH03MAH
756	6031	RTA22200227F.m.13.1.P.Seq	F	M00006731:43	CH02COH
757	185628	RTA22200242F.j.21.1.P.Seq	F	M00027035:89	CH04MAL
758	24719	RTA22200244F.j.04.1.P.Seq	F	M00027197:67	CH04MAL
759	3428	RTA22200237F.d.24.1.P.Seq	F	M00022716:36	CH03MAH
760	2676	RTA22200227F.j.24.1.P.Seq	F	M00006695:88	CH02COH
761	649148	RTA22200007F.j.24.1.P.Seq	F	M00056231:79	CH15CON
762	234605	RTA22200009F.c.17.2.P.Seq	F	M00042515:110	CH16COP
763	2224	RTA22200232F.g.14.1.P.Seq	F	M00022049:27	CH03MAH
764	185642	RTA22200243F.a.07.1.P.Seq	F	M00027076:67	CH04MAL
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Table 1

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768	11012	RTA22200227F.k.14.1.P.Seq	F	M00006704:76	CH02COH
769	535208	RTA22200005F.c.23.1.P.Seq	F	M00055869:16	CH15CON
770	448606	RTA22200014F.j.14.1.P.Seq	F	M00056994:33	CH16COP
771	12304	RTA22200244F.b.17.1.P.Seq	F	M00027172:33	CH04MAL
772	2756	RTA22200229F.h.17.1.P.Seq	F	M00006989:54	CH02COH
773	367	RTA22200005F.d.04.1.P.Seq	F	M00055871:65	CH15CON
774	11351	RTA22200229F.c.09.1.P.Seq	F	M00006937:63	CH02COH
775	6858	RTA22200228F.n.03.2.P.Seq	F	M00006888:75	CH02COH
776	7750	RTA22200241F.g.01.1.P.Seq	F	M00026899:711	CH04MAL
777	6923	RTA22200232F.h.12.1.P.Seq	F	M00022060:69	CH03MAH
778	11552	RTA22200232F.p.03.1.P.Seq	F	M00022163:38	CH03MAH
779	12448	RTA22200243F.c.10.1.P.Seq	F	M00027090:58	CH04MAL
780	2944	RTA22200227F.m.11.1.P.Seq	F	M00006731:22	CH02COH
781	10342	RTA22200231F.l.03.1.P.Seq	F	M00007981:24	CH03MAH
782	9026	RTA22200222F.o.20.1.P.Seq	F	M00004304:47	CH01COH
783	10342	RTA22200238F.m.23.1.P.Seq	F	M00022997:38	CH03MAH
784	6455	RTA22200235F.f.08.1.P.Seq	F	M00022465:65	CH03MAH
785	6455	RTA22200232F.b.15.1.P.Seq	F	M00021886:66	CH03MAH
786	3416	RTA22200227F.k.16.1.P.Seq	F	M00006705:79	CH02COH
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789	7393	RTA22200241F.l.09.1.P.Seq	F	M00026934:59	CH04MAL
790	14390	RTA22200244F.i.10.1.P.Seq	F	M00027193:35	CH04MAL
791	661	RTA22200241F.a.15.1.P.Seq	F	M00026856:311	CH04MAL
792	452992	RTA22200013F.e.07.1.P.Seq	F	M00056826:212	CH16COP
793	1943	RTA22200235F.k.21.2.P.Seq	F	M00022528:812	CH03MAH
794	2027	RTA22200244F.l.20.1.P.Seq	F	M00027207:59	CH04MAL
795	5482	RTA22200225F.p.15.1.P.Seq	F	M00005565:65	CH02COH
796	650493	RTA22200007F.c.10.1.P.Seq	F	M00056156:112	CH15CON
797	640318	RTA22200007F.b.04.1.P.Seq	F	M00056145:24	CH15CON
798	646309	RTA22200011F.p.23.1.P.Seq	F	M00056661:55	CH16COP
799	4316	RTA22200248F.e.15.1.P.Seq	F	M00027543:77	CH04MAL
800	449701	RTA22200012F.d.12.1.P.Seq	F	M00056695:89	CH16COP
801	560367	RTA22200013F.e.03.1.P.Seq	F	M00056824:310	CH16COP
802	9997	RTA22200238F.o.18.1.P.Seq	F	M00023015:42	CH03MAH
803	649106	RTA22200012F.f.03.1.P.Seq	F	M00056707:52	CH16COP
804	461835	RTA22200007F.b.18.1.P.Seq	F	M00056150:312	CH15CON
805	640590	RTA22200003F.m.09.1.P.Seq	F	M00055703:35	CH15CON
806	648340	RTA22200007F.a.08.1.P.Seq	F	M00056139:54	CH15CON
807	554812	RTA22200014F.g.21.2.P.Seq	F	M00056969:38	CH16COP
808	447035	RTA22200007F.m.06.1.P.Seq	F	M00056252:511	CH15CON
809	1208	RTA22200238F.g.03.1.P.Seq	F	M00022908:83	CH03MAH
810	3114	RTA22200232F.f.24.1.P.Seq	F	M00022015:611	CH03MAH

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813	450323	RTA22200015F.o.17.1.P.Seq	F	M00057141:42	CH16COP
814	11567	RTA22200232F.f.16.1.P.Seq	F	M00022010:81	CH03MAH
815	11567	RTA22200232F.c.14.1.P.Seq	F	M00021915:510	CH03MAH
816	6660	RTA22200222F.j.01.1.P.Seq	F	M00003986:712	CH01COH
817	9026	RTA22200222F.n.12.1.P.Seq	F	M00004198:111	CH01COH
818	185539	RTA22200243F.b.09.1.P.Seq	F	M00027084:810	CH04MAL
819	3224	RTA22200222F.d.01.1.P.Seq	F	M00001537:610	CH01COH
820	95700	RTA22200240F.l.12.1.P.Seq	F	M00026804:43	CH04MAL
821	4439	RTA22200222F.n.01.1.P.Seq	F	M00004167:411	CH01COH
822	3428	RTA22200236F.n.08.1.P.Seq	F	M00022667:511	CH03MAH
823	1456	RTA22200236F.p.05.1.P.Seq	F	M00022681:56	CH03MAH
824	11343	RTA22200228F.g.03.1.P.Seq	F	M00006822:59	CH02COH
825	729206	RTA22200012F.k.20.1.P.Seq	F	M00056746:46	CH16COP
826	558371	RTA22200015F.p.13.1.P.Seq	F	M00057147:11	CH16COP
827	451589	RTA22200011F.m.21.1.P.Seq	F	M00056635:59	CH16COP
828	404475	RTA22200012F.f.10.1.P.Seq	F	M00056708:36	CH16COP
829	734582	RTA22200017F.e.07.1.P.Seq	F	M00057334:61	CH16COP
830	729779	RTA22200011F.i.11.1.P.Seq	F	M00056596:52	CH16COP
831	555244	RTA22200023F.l.23.1.P.Seq	F	M00055093:85	CH17COHLV
832	449269	RTA22200014F.p.17.2.P.Seq	F	M00057035:39	CH16COP
833	4609	RTA22200227F.a.11.1.P.Seq	F	M00006583:83	CH02COH
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840	185651	RTA22200248F.g.16.1.P.Seq	F	M00027556:710	CH04MAL
841	7379	RTA22200230F.d.19.1.P.Seq	F	M00007128:76	CH02COH
842	728408	RTA22200014F.p.13.2.P.Seq	F	M00057033:69	CH16COP
843	646309	RTA22200007F.e.15.1.P.Seq	F	M00056184:83	CH15CON
844	405073	RTA22200003F.m.14.1.P.Seq	F	M00055704:47	CH15CON
845	185489	RTA22200241F.j.24.1.P.Seq	F	M00026926:35	CH04MAL
846	447326	RTA22200005F.i.15.1.P.Seq	F	M00055909:58	CH15CON
847	11006	RTA22200227F.c.15.1.P.Seq	F	M00006610:48	CH02COH
848	6863	RTA22200227F.a.23.1.P.Seq	F	M00006588:86	CH02COH
849	11351	RTA22200225F.p.12.1.P.Seq	F	M00005563:212	CH02COH
850	401553	RTA22200005F.f.13.1.P.Seq	F	M00055884:21	CH15CON
851	504513	RTA22200007F.h.19.1.P.Seq	F	M00056213:14	CH15CON
852	645979	RTA22200012F.g.11.1.P.Seq	F	M00056713:78	CH16COP
853	6923	RTA22200233F.b.21.1.P.Seq	F	M00008023:412	CH03MAH
854	1924	RTA22200229F.l.18.1.P.Seq	F	M00007034:26	CH02COH
855	5838	RTA22200230F.f.02.1.P.Seq	F	M00007136:35	CH02COH

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858	12419	RTA22200241F.c.04.1.P.Seq	F	M00026865:711	CH04MAL
859	3224	RTA22200222F.c.24.1.P.Seq	F	M00001537:610	CH01COH
860	5474	RTA22200230F.i.23.1.P.Seq	F	M00007174:46	CH02COH
861	3522	RTA22200227F.f.23.1.P.Seq	F	M00006650:45	CH02COH
862	731785	RTA22200012F.o.21.1.P.Seq	F	M00056777:67	CH16COP
863	3765	RTA22200228F.d.10.1.P.Seq	F	M00006803:37	CH02COH
864	640323	RTA22200012F.a.10.1.P.Seq	F	M00056664:76	CH16COP
865	379105	RTA22200012F.i.11.1.P.Seq	F	M00056728:85	CH16COP
866	448029	RTA22200012F.n.03.1.P.Seq	F	M00056764:58	CH16COP
867	650476	RTA22200005F.h.07.1.P.Seq	F	M00055893:35	CH15CON
868	640525	RTA22200007F.f.12.1.P.Seq	F	M00056192:82	CH15CON
869	390124	RTA22200007F.n.09.1.P.Seq	F	M00056267:52	CH15CON
870	464029	RTA22200023F.p.21.1.P.Seq	F	M00055137:34	CH17COHLV
871	468109	RTA22200005F.e.18.1.P.Seq	F	M00055880:612	CH15CON
872	21669	RTA22200023F.h.20.1.P.Seq	F	M00055064:512	CH17COHLV
873	651088	RTA22200007F.j.07.2.P.Seq	F	M00056224:210	CH15CON
874	2737	RTA22200023F.d.15.1.P.Seq	F	M00055039:71	CH17COHLV
875	556421	RTA22200005F.e.14.1.P.Seq	F	M00055879:44	CH15CON
876	452245	RTA22200023F.c.23.1.P.Seq	F	M00055034:81	CH17COHLV
877	447539	RTA22200005F.e.22.1.P.Seq	F	M00055882:19	CH15CON
878	546642	RTA22200014F.o.20.2.P.Seq	F	M00057029:312	CH16COP
879	236368	RTA22200006F.j.23.2.P.Seq	F	M00056077:56	CH15CON
880	644523	RTA22200012F.b.12.1.P.Seq	F	M00056673:56	CH16COP
881	729173	RTA22200012F.k.02.1.P.Seq	F	M00056739:411	CH16COP
882	8315	RTA22200231F.a.06.1.P.Seq	F	M00007927:31	CH03MAH
883	450463	RTA22200007F.i.11.2.P.Seq	F	M00056218:73	CH15CON
884	650856	RTA22200012F.o.13.1.P.Seq	F	M00056775:31	CH16COP
885	648109	RTA22200005F.i.14.1.P.Seq	F	M00055909:71	CH15CON
886	726644	RTA22200013F.d.19.1.P.Seq	F	M00056822:711	CH16COP
887	727224	RTA22200013F.h.19.1.P.Seq	F	M00056859:412	CH16COP
888	557906	RTA22200023F.h.18.1.P.Seq	F	M00055063:71	CH17COHLV
889	502683	RTA22200007F.e.22.1.P.Seq	F	M00056185:46	CH15CON
890	728408	RTA22200011F.i.06.1.P.Seq	F	M00056594:310	CH16COP
891	647952	RTA22200005F.j.11.1.P.Seq	F	M00055919:16	CH15CON
892	639991	RTA22200009F.l.23.2.P.Seq	F	M00042846:49	CH16COP
893	735346	RTA22200016F.m.21.1.P.Seq	F	M00057266:44	CH16COP
894	102655	RTA22200007F.i.23.2.P.Seq	F	M00056222:62	CH15CON
895	553629	RTA22200012F.o.03.1.P.Seq	F	M00056772:58	CH16COP
896	1609	RTA22200226F.i.23.1.P.Seq	F	M00005708:27	CH02COH
897	641884	RTA22200005F.l.16.1.P.Seq	F	M00055937:32	CH15CON
898	648872	RTA22200007F.p.10.1.P.Seq	F	M00056286:112	CH15CON
899	644242	RTA22200005F.i.20.1.P.Seq	F	M00055911:56	CH15CON
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903	5838	RTA22200226F.c.19.1.P.Seq	F	M00005621:88	CH02COH
904	645530	RTA22200006F.k.07.2.P.Seq	F	M00056079:67	CH15CON
905	649732	RTA22200012F.b.05.1.P.Seq	F	M00056669:77	CH16COP
906	649143	RTA22200007F.p.01.1.P.Seq	F	M00056283:52	CH15CON
907	7571	RTA22200225F.h.24.1.P.Seq	F	M00005481:36	CH02COH
908	4572	RTA22200236F.j.09.1.P.Seq	F	M00022651:31	CH03MAH
909	2147	RTA22200229F.j.14.1.P.Seq	F	M00007006:11	CH02COH
910	462659	RTA22200008F.h.10.1.P.Seq	F	M00056475:62	CH15CON
911	727723	RTA22200012F.m.21.1.P.Seq	F	M00056761:65	CH16COP
912	2636	RTA22200226F.g.21.1.P.Seq	F	M00005657:112	CH02COH
913	500959	RTA22200005F.k.21.1.P.Seq	F	M00055931:51	CH15CON
914	3428	RTA22200231F.f.07.1.P.Seq	F	M00007954:24	CH03MAH
915	734929	RTA22200011F.h.24.1.P.Seq	F	M00056592:47	CH16COP
916	453592	RTA22200001F.g.19.1.P.Seq	F	M00042706:14	CH15CON
917	15414	RTA22200026F.d.21.1.P.Seq	F	M00055423:810	CH17COHLV
918	648959	RTA22200002F.m.22.1.P.Seq	F	M00055542:19	CH15CON
919	453470	RTA22200007F.g.06.1.P.Seq	F	M00056198:47	CH15CON
920	649272	RTA22200007F.k.03.2.P.Seq	F	M00056232:56	CH15CON
921	1699	RTA22200012F.p.06.1.P.Seq	F	M00056781:512	CH16COP
922	649719	RTA22200006F.m.21.2.P.Seq	F	M00056098:81	CH15CON
923	562805	RTA22200023F.d.08.1.P.Seq	F	M00055037:510	CH17COHLV
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925	549178	RTA22200023F.d.22.1.P.Seq	F	M00055041:52	CH17COHLV
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928	561807	RTA22200004F.l.07.1.P.Seq	F	M00055808:711	CH15CON
929	641373	RTA22200006F.m.23.2.P.Seq	F	M00056099:79	CH15CON
930	514418	RTA22200022F.a.15.1.P.Seq	F	M00054870:49	CH17COHLV
931	567078	RTA22200006F.b.18.2.P.Seq	F	M00056007:111	CH15CON
932	643061	RTA22200006F.n.01.2.P.Seq	F	M00056099:811	CH15CON
933	549160	RTA22200020F.i.09.1.P.Seq	F	M00054638:38	CH17COHLV
934	449269	RTA22200009F.e.07.1.P.Seq	F	M00042770:212	CH16COP
935	453082	RTA22200001F.e.03.1.P.Seq	F	M00042564:811	CH15CON
936	418135	RTA22200026F.a.09.1.P.Seq	F	M00055406:45	CH17COHLV
937	2783	RTA22200023F.b.23.1.P.Seq	F	M00055027:47	CH17COHLV
938	549435	RTA22200007F.j.06.2.P.Seq	F	M00056223:73	CH15CON
939	446614	RTA22200009F.i.13.2.P.Seq	F	M00042816:64	CH16COP
940	449477	RTA22200012F.p.04.1.P.Seq	F	M00056780:32	CH16COP
941	454380	RTA22200013F.c.09.1.P.Seq	F	M00056815:21	CH16COP
942	450914	RTA22200013F.c.05.1.P.Seq	F	M00056812:58	CH16COP
943	736860	RTA22200016F.p.14.1.P.Seq	F	M00057283:56	CH16COP
944	727224	RTA22200011F.h.19.1.P.Seq	F	M00056592:64	CH16COP
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949	449437	RTA22200009F.e.03.1.P.Seq	F	M00042767:42	CH16COP
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951	555318	RTA22200022F.e.11.1.P.Seq	F	M00054903:312	CH17COHLV
952	456764	RTA22200005F.k.20.1.P.Seq	F	M00055931:31	CH15CON
953	11567	RTA22200231F.g.22.1.P.Seq	F	M00007965:710	CH03MAH
954	3522	RTA22200229F.j.18.1.P.Seq	F	M00007007:85	CH02COH
955	456528	RTA22200016F.p.05.1.P.Seq	F	M00057280:16	CH16COP
956	639142	RTA22200013F.m.02.1.P.Seq	F	M00056887:68	CH16COP
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983	640525	RTA22200004F.i.10.1.P.Seq	F	M00055796:510	CH15CON
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986	380284	RTA22200004F.c.17.1.P.Seq	F	M00055755:83	CH15CON
987	556260	RTA22200020F.p.08.1.P.Seq	F	M00054707:55	CH17COHLV
988	650476	RTA22200013F.p.21.1.P.Seq	F	M00056916:64	CH16COP
989	554500	RTA22200006F.n.14.2.P.Seq	F	M00056103:812	CH15CON
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993	554080	RTA22200014F.o.19.3.P.Seq	F	M00057028:49	CH16COP
994	546705	RTA22200021F.i.06.3.P.Seq	F	M00054781:24	CH17COHLV
995	558337	RTA22200021F.a.02.2.P.Seq	F	M00054720:611	CH17COHLV
996	449269	RTA22200014F.p.17.3.P.Seq	F	M00057035:39	CH16COP
997	645799	RTA22200014F.d.22.2.P.Seq	F	M00056952:84	CH16COP
998	456506	RTA22200001F.l.10.1.P.Seq	F	M00042889:19	CH15CON
999	218416	RTA22200026F.c.09.1.P.Seq	F	M00055414:111	CH17COHLV
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1001	554703	RTA22200024F.p.19.1.P.Seq	F	M00055262:211	CH17COHLV
1002	650204	RTA22200008F.c.16.1.P.Seq	F	M00056313:67	CH15CON
1003	456808	RTA22200014F.a.19.2.P.Seq	F	M00056924:26	CH16COP
1004	420686	RTA22200004F.n.01.1.P.Seq	F	M00055821:16	CH15CON
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1007	24939	RTA22200016F.i.15.1.P.Seq	F	M00057229:66	CH16COP
1008	556561	RTA22200022F.n.08.1.P.Seq	F	M00054981:36	CH17COHLV
1009	380406	RTA22200001F.l.13.1.P.Seq	F	M00042890:38	CH15CON
1010	456764	RTA22200004F.a.10.1.P.Seq	F	M00055736:46	CH15CON
1011	725703	RTA22200016F.a.04.1.P.Seq	F	M00057154:46	CH16COP
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1013	5830	RTA22200013F.m.20.1.P.Seq	F	M00056894:76	CH16COP
1014	539955	RTA22200013F.o.22.1.P.Seq	F	M00056909:49	CH16COP
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1017	448511	RTA22200022F.n.14.1.P.Seq	F	M00054984:37	CH17COHLV
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1020	406092	RTA22200004F.a.20.1.P.Seq	F	M00055740:212	CH15CON
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1023	560700	RTA22200026F.f.08.1.P.Seq	F	M00055475:78	CH17COHLV
1024	552879	RTA22200024F.m.13.1.P.Seq	F	M00055242:11	CH17COHLV
1025	640590	RTA22200003F.l.14.1.P.Seq	F	M00055692:57	CH15CON
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1027	648934	RTA22200003F.a.23.1.P.Seq	F	M00055578:89	CH15CON
1028	557948	RTA22200021F.g.09.3.P.Seq	F	M00054766:24	CH17COHLV
1029	377094	RTA22200021F.d.05.2.P.Seq	F	M00054741:510	CH17COHLV
1030	449617	RTA22200026F.c.15.1.P.Seq	F	M00055415:811	CH17COHLV
1031	978	RTA22200004F.m.17.1.P.Seq	F	M00055820:58	CH15CON
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1033	641837	RTA22200003F.b.20.1.P.Seq	F	M00055586:65	CH15CON
1034	449750	RTA22200021F.h.08.3.P.Seq	F	M00054773:112	CH17COHLV
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1039	644205	RTA22200003F.d.03.1.P.Seq	F	M00055602:710	CH15CON
1040	506744	RTA22200021F.n.01.2.P.Seq	F	M00054841:27	CH17COHLV
1041	557797	RTA22200024F.c.03.1.P.Seq	F	M00055154:64	CH17COHLV
1042	640356	RTA22200004F.h.18.1.P.Seq	F	M00055792:57	CH15CON
1043	462659	RTA22200001F.i.16.1.P.Seq	F	M00042732:79	CH15CON
1044	645633	RTA22200008F.a.01.1.P.Seq	F	M00056291:25	CH15CON
1045	237288	RTA22200002F.g.19.1.P.Seq	F	M00055495:63	CH15CON
1046	454343	RTA22200016F.d.13.1.P.Seq	F	M00057181:46	CH16COP
1047	386543	RTA22200024F.g.20.1.P.Seq	F	M00055198:67	CH17COHLV
1048	446404	RTA22200003F.b.10.1.P.Seq	F	M00055582:54	CH15CON
1049	456528	RTA22200014F.n.13.2.P.Seq	F	M00057019:82	CH16COP
1050	456528	RTA22200015F.l.08.1.P.Seq	F	M00057118:32	CH16COP
1051	452781	RTA22200004F.o.03.1.P.Seq	F	M00055827:36	CH15CON
1052	551671	RTA22200021F.b.20.2.P.Seq	F	M00054729:51	CH17COHLV
1053	644242	RTA22200004F.h.08.1.P.Seq	F	M00055791:45	CH15CON
1054	561892	RTA22200025F.n.14.2.P.Seq	F	M00055391:76	CH17COHLV
1055	450429	RTA22200004F.e.09.1.P.Seq	F	M00055771:41	CH15CON
1056	533588	RTA22200001F.k.13.1.P.Seq	F	M00042881:38	CH15CON
1057	553877	RTA22200004F.f.03.1.P.Seq	F	M00055775:210	CH15CON
1058	650195	RTA22200004F.f.23.1.P.Seq	F	M00055782:62	CH15CON
1059	193486	RTA22200020F.b.22.1.P.Seq	F	M00054580:411	CH17COHLV
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1063	403632	RTA22200020F.b.08.1.P.Seq	F	M00054575:31	CH17COHLV
1064	390124	RTA22200021F.n.17.2.P.Seq	F	M00054849:811	CH17COHLV
1065	390124	RTA22200016F.i.16.1.P.Seq	F	M00057230:412	CH16COP
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1067	394413	RTA22200001F.k.11.1.P.Seq	F	M00042750:29	CH15CON
1068	549178	RTA22200020F.a.18.1.P.Seq	F	M00054571:31	CH17COHLV
1069	453079	RTA22200004F.e.11.1.P.Seq	F	M00055771:111	CH15CON
1070	463824	RTA22200001F.j.03.1.P.Seq	F	M00042735:17	CH15CON
1071	736595	RTA22200016F.d.16.1.P.Seq	F	M00057182:211	CH16COP
1072	102655	RTA22200004F.m.02.1.P.Seq	F	M00055816:61	CH15CON
1073	448606	RTA22200014F.j.14.2.P.Seq	F	M00056994:33	CH16COP
1074	504513	RTA22200004F.n.12.1.P.Seq	F	M00055823:411	CH15CON
1075	20036	RTA22200004F.f.12.1.P.Seq	F	M00055779:12	CH15CON
1076	530883	RTA22200016F.d.08.1.P.Seq	F	M00057180:811	CH16COP
1077	447126	RTA22200004F.o.18.1.P.Seq	F	M00055832:512	CH15CON
1078	556561	RTA22200025F.d.13.1.P.Seq	F	M00055302:62	CH17COHLV
1079	455096	RTA22200020F.e.15.1.P.Seq	F	M00054600:77	CH17COHLV
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1084	402707	RTA22200018F.d.23.1.P.Seq	F	M00042520:64	CH17COHLV
1085	557903	RTA22200025F.b.15.1.P.Seq	F	M00055279:78	CH17COHLV
1086	451243	RTA22200018F.i.18.1.P.Seq	F	M00043324:44	CH17COHLV
1087	452506	RTA22200025F.b.06.1.P.Seq	F	M00055274:62	CH17COHLV
1088	554703	RTA22200025F.g.23.1.P.Seq	F	M00055345:811	CH17COHLV
1089	449580	RTA22200018F.c.03.1.P.Seq	F	M00042450:810	CH17COHLV
1090	3316	RTA22200025F.i.02.1.P.Seq	F	M00055356:36	CH17COHLV
1091	97507	RTA22200025F.i.22.1.P.Seq	F	M00055364:51	CH17COHLV
1092	556216	RTA22200025F.k.07.1.P.Seq	F	M00055373:410	CH17COHLV
1093	185401	RTA22200250F.d.22.1.P.Seq	F	M00027808:710	CH04MAL
1094	3758	RTA22200248F.o.08.1.P.Seq	F	M00027605:55	CH04MAL
1095	95700	RTA22200248F.l.15.1.P.Seq	F	M00027588:16	CH04MAL
1096	2478	RTA22200250F.d.12.1.P.Seq	F	M00027803:810	CH04MAL
1097	550267	RTA22200011F.d.14.1.P.Seq	F	M00056552:210	CH16COP
1098	185652	RTA22200250F.c.19.1.P.Seq	F	M00027786:21	CH04MAL
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1100	5078	RTA22200011F.a.19.1.P.Seq	F	M00056529:89	CH16COP
1101	9784	RTA22200249F.h.22.1.P.Seq	F	M00027681:42	CH04MAL
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1105	551172	RTA22200011F.b.19.1.P.Seq	F	M00056537:19	CH16COP
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1107	6317	RTA22200224F.e.13.1.P.Seq	F	M00004971:74	CH02COH
1108	2478	RTA22200234F.f.21.1.P.Seq	F	M00022235:311	CH03MAH
1109	4727	RTA22200234F.f.10.1.P.Seq	F	M00022231:512	CH03MAH
1110	185598	RTA22200249F.p.13.1.P.Seq	F	M00027747:41	CH04MAL
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1113	189561	RTA22200010F.i.20.1.P.Seq	F	M00056425:88	CH16COP
1114	728131	RTA22200010F.n.22.1.P.Seq	F	M00056507:210	CH16COP
1115	560984	RTA22200019F.k.07.1.P.Seq	F	M00054521:64	CH17COHLV
1116	549945	RTA22200019F.j.03.1.P.Seq	F	M00054513:112	CH17COHLV
1117	554785	RTA22200019F.g.24.1.P.Seq	F	M00054499:511	CH17COHLV
1118	554785	RTA22200019F.h.01.1.P.Seq	F	M00054499:511	CH17COHLV
1119	551235	RTA22200019F.e.14.1.P.Seq	F	M00043506:89	CH17COHLV
1120	2634	RTA22200237F.e.18.1.P.Seq	F	M00022720:39	CH03MAH
1121	548858	RTA22200019F.g.06.1.P.Seq	F	M00054493:110	CH17COHLV
1122	15625	RTA22200005F.n.15.1.P.Seq	F	M00055966:46	CH15CON
1123	649259	RTA22200006F.a.21.2.P.Seq	F	M00056000:49	CH15CON
1124	550267	RTA22200005F.b.15.1.P.Seq	F	M00055856:67	CH15CON
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1130	3085	RTA22200237F.n.05.1.P.Seq	F	M00022829:86	CH03MAH
1131	638854	RTA22200005F.b.09.1.P.Seq	F	M00055854:54	CH15CON
1132	7379	RTA22200225F.l.06.1.P.Seq	F	M00005501:79	CH02COH
1133	185562	RTA22200248F.i.11.1.P.Seq	F	M00027571:311	CH04MAL
1134	452491	RTA22200005F.a.16.1.P.Seq	F	M00055849:48	CH15CON
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1136	6056	RTA22200235F.f.14.1.P.Seq	F	M00022468:512	CH03MAH
1137	643103	RTA22200005F.d.12.1.P.Seq	F	M00055873:211	CH15CON
1138	6923	RTA22200237F.h.10.1.P.Seq	F	M00022741:211	CH03MAH
1139	6923	RTA22200237F.h.16.1.P.Seq	F	M00022745:37	CH03MAH
1140	901	RTA22200237F.o.03.1.P.Seq	F	M00022831:34	CH03MAH
1141	901	RTA22200237F.n.23.1.P.Seq	F	M00022831:19	CH03MAH
1142	367	RTA22200236F.h.18.1.P.Seq	F	M00022641:310	CH03MAH
1143	4043	RTA22200228F.l.13.2.P.Seq	F	M00006873:21	CH02COH
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1145	11881	RTA22200238F.e.15.1.P.Seq	F	M00022899:39	CH03MAH
1146	9113	RTA22200230F.l.04.1.P.Seq	F	M00007204:712	CH02COH
1147	185460	RTA22200243F.p.24.1.P.Seq	F	M00027165:611	CH04MAL
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1156	647952	RTA22200007F.b.02.1.P.Seq	F	M00056144:39	CH15CON
1157	455601	RTA22200005F.p.18.1.P.Seq	F	M00055990:25	CH15CON
1158	641901	RTA22200005F.p.07.1.P.Seq	F	M00055984:32	CH15CON
1159	446878	RTA22200009F.b.21.2.P.Seq	F	M00042466:86	CH16COP
1160	7436	RTA22200232F.h.08.1.P.Seq	F	M00022058:11	CH03MAH
1161	2245	RTA22200230F.i.03.1.P.Seq	F	M00007166:56	CH02COH
1162	3531	RTA22200227F.o.01.1.P.Seq	F	M00006746:26	CH02COH
1163	9625	RTA22200240F.k.21.1.P.Seq	F	M00023520:77	CH04MAL
1164	727489	RTA22200012F.l.19.1.P.Seq	F	M00056754:14	CH16COP
1165	159925	RTA22200240F.j.14.1.P.Seq	F	M00023428:43	CH04MAL
1166	645210	RTA22200012F.g.17.1.P.Seq	F	M00056715:54	CH16COP
1167	157629	RTA22200235F.d.24.1.P.Seq	F	M00022453:84	CH03MAH
1168	8375	RTA22200231F.l.07.1.P.Seq	F	M00007982:611	CH03MAH
1169	4319	RTA22200230F.e.02.1.P.Seq	F	M00007129:68	CH02COH
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1175	8354	RTA22200238F.d.13.1.P.Seq	F	M00022892:77	CH03MAH
1176	2099	RTA22200243F.f.05.1.P.Seq	F	M00027111:84	CH04MAL
1177	449956	RTA22200011F.l.18.1.P.Seq	F	M00056624:85	CH16COP
1178	649106	RTA22200003F.o.09.1.P.Seq	F	M00055723:55	CH15CON
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1180	732712	RTA22200011F.k.21.1.P.Seq	F	M00056616:110	CH16COP
1181	185562	RTA22200241F.m.01.1.P.Seq	F	M00026938:64	CH04MAL
1182	3516	RTA22200225F.i.17.1.P.Seq	F	M00005485:19	CH02COH
1183	185562	RTA22200241F.l.24.1.P.Seq	F	M00026938:64	CH04MAL
1184	185460	RTA22200241F.a.08.1.P.Seq	F	M00026854:57	CH04MAL
1185	10947	RTA22200237F.l.16.1.P.Seq	F	M00022813:18	CH03MAH
1186	452856	RTA22200007F.d.13.1.P.Seq	F	M00056169:66	CH15CON
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1198	185482	RTA22200241F.d.04.1.P.Seq	F	M00026873:28	CH04MAL
1199	185715	RTA22200240F.l.14.1.P.Seq	F	M00026805:24	CH04MAL
1200	66017	RTA22200243F.d.10.1.P.Seq	F	M00027097:711	CH04MAL
1201	403111	RTA22200007F.j.14.1.P.Seq	F	M00056226:612	CH15CON
1202	3224	RTA22200222F.o.18.1.P.Seq	F	M00004296:711	CH01COH
1203	966	RTA22200238F.k.11.1.P.Seq	F	M00022961:211	CH03MAH
1204	3639	RTA22200235F.j.05.2.P.Seq	F	M00022509:26	CH03MAH
1205	5388	RTA22200243F.k.17.1.P.Seq	F	M00027139:36	CH04MAL
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1211	735936	RTA22200011F.i.02.1.P.Seq	F	M00056593:55	CH16COP
1212	607430	RTA22200005F.o.04.1.P.Seq	F	M00055971:57	CH15CON
1213	452856	RTA22200007F.g.23.1.P.Seq	F	M00056205:41	CH15CON
1214	557903	RTA22200016F.g.07.1.P.Seq	F	M00057211:67	CH16COP
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Table 1

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1218	418763	RTA22200004F.l.11.1.P.Seq	F	M00055811:18	CH15CON
1219	2245	RTA22200230F.a.12.1.P.Seq	F	M00007097:24	CH02COH
1220	403668	RTA22200012F.o.18.1.P.Seq	F	M00056777:33	CH16COP
1221	15427	RTA22200020F.m.08.1.P.Seq	F	M00054677:42	CH17COHLV
1222	555714	RTA22200020F.n.23.1.P.Seq	F	M00054691:55	CH17COHLV
1223	555830	RTA22200022F.d.19.1.P.Seq	F	M00054899:67	CH17COHLV
1224	4620	RTA22200231F.e.13.1.P.Seq	F	M00007951:15	CH03MAH
1225	171511	RTA22200012F.p.21.1.P.Seq	F	M00056789:34	CH16COP
1226	451401	RTA22200008F.h.08.1.P.Seq	F	M00056475:312	CH15CON
1227	447501	RTA22200002F.e.01.1.P.Seq	F	M00055453:51	CH15CON
1228	460445	RTA22200022F.p.12.1.P.Seq	F	M00055005:28	CH17COHLV
1229	375814	RTA22200004F.k.20.1.P.Seq	F	M00055806:59	CH15CON
1230	449356	RTA22200026F.d.19.1.P.Seq	F	M00055423:78	CH17COHLV
1231	468736	RTA22200022F.i.10.1.P.Seq	F	M00054943:33	CH17COHLV
1232	548858	RTA22200023F.a.04.1.P.Seq	F	M00055011:54	CH17COHLV
1233	3693	RTA22200240F.g.16.1.P.Seq	F	M00023393:32	CH04MAL
1234	642973	RTA22200005F.k.19.1.P.Seq	F	M00055931:13	CH15CON
1235	561180	RTA22200012F.n.04.1.P.Seq	F	M00056765:110	CH16COP
1236	453708	RTA22200020F.p.07.1.P.Seq	F	M00054707:28	CH17COHLV
1237	645305	RTA22200001F.p.17.1.P.Seq	F	M00054917:69	CH15CON
1238	463487	RTA22200007F.e.12.1.P.Seq	F	M00056184:48	CH15CON
1239	11131	RTA22200230F.b.14.1.P.Seq	F	M00007105:312	CH02COH
1240	561807	RTA22200020F.k.18.1.P.Seq	F	M00054660:65	CH17COHLV
1241	452800	RTA22200023F.n.03.1.P.Seq	F	M00055104:212	CH17COHLV
1242	372960	RTA22200012F.p.07.1.P.Seq	F	M00056782:26	CH16COP
1243	449317	RTA22200009F.k.10.2.P.Seq	F	M00042835:31	CH16COP
1244	730759	RTA22200011F.n.19.1.P.Seq	F	M00056643:76	CH16COP
1245	9113	RTA22200226F.i.12.1.P.Seq	F	M00005704:410	CH02COH
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1249	554500	RTA22200019F.n.10.1.P.Seq	F	M00054547:59	CH17COHLV
1250	639662	RTA22200001F.p.19.1.P.Seq	F	M00054917:412	CH15CON
1251	421	RTA22200009F.o.23.1.P.Seq	F	M00042869:56	CH16COP
1252	736014	RTA22200016F.o.19.1.P.Seq	F	M00057277:39	CH16COP
1253	643061	RTA22200006F.m.24.2.P.Seq	F	M00056099:811	CH15CON
1254	9113	RTA22200229F.m.02.1.P.Seq	F	M00007035:56	CH02COH
1255	650856	RTA22200007F.i.19.2.P.Seq	F	M00056221:55	CH15CON
1256	476223	RTA22200009F.g.09.1.P.Seq	F	M00042792:64	CH16COP
1257	737088	RTA22200011F.f.01.1.P.Seq	F	M00056564:59	CH16COP
1258	449512	RTA22200022F.p.03.1.P.Seq	F	M00055000:64	CH17COHLV
1259	449457	RTA22200023F.m.21.1.P.Seq	F	M00055100:48	CH17COHLV
1260	521901	RTA22200022F.l.07.1.P.Seq	F	M00054964:811	CH17COHLV

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1264	450429	RTA22200013F.b.10.1.P.Seq	F	M00056805:29	CH16COP
1265	2478	RTA22200238F.j.18.1.P.Seq	F	M00022956:29	CH03MAH
1266	644099	RTA22200004F.b.06.1.P.Seq	F	M00055743:312	CH15CON
1267	552614	RTA22200008F.e.13.1.P.Seq	F	M00056344:73	CH15CON
1268	452523	RTA22200007F.g.15.1.P.Seq	F	M00056203:810	CH15CON
1269	446789	RTA22200004F.l.01.1.P.Seq	F	M00055807:710	CH15CON
1270	515631	RTA22200010F.c.15.1.P.Seq	F	M00056369:412	CH16COP
1271	452523	RTA22200009F.h.13.1.P.Seq	F	M00042805:88	CH16COP
1272	640116	RTA22200007F.l.23.2.P.Seq	F	M00056250:61	CH15CON
1273	9113	RTA22200230F.a.14.1.P.Seq	F	M00007097:47	CH02COH
1274	562221	RTA22200006F.b.03.2.P.Seq	F	M00056001:59	CH15CON
1275	455972	RTA22200012F.i.18.1.P.Seq	F	M00056729:44	CH16COP
1276	449137	RTA22200009F.e.12.1.P.Seq	F	M00042771:13	CH16COP
1277	5078	RTA22200013F.p.15.1.P.Seq	F	M00056914:29	CH16COP
1278	5078	RTA22200013F.g.09.1.P.Seq	F	M00056844:57	CH16COP
1279	4016	RTA22200228F.d.20.1.P.Seq	F	M00006807:712	CH02COH
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1281	562292	RTA22200023F.g.07.1.P.Seq	F	M00055053:23	CH17COHLV
1282	403111	RTA22200007F.j.14.2.P.Seq	F	M00056226:612	CH15CON
1283	403111	RTA22200007F.m.22.1.P.Seq	F	M00056262:28	CH15CON
1284	500959	RTA22200006F.i.23.2.P.Seq	F	M00056066:87	CH15CON
1285	763	RTA22200231F.g.24.1.P.Seq	F	M00007965:33	CH03MAH
1286	763	RTA22200231F.h.01.1.P.Seq	F	M00007965:33	CH03MAH
1287	500959	RTA22200008F.f.19.1.P.Seq	F	M00056456:19	CH15CON
1288	452071	RTA22200001F.g.03.1.P.Seq	F	M00042700:85	CH15CON
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1290	455492	RTA22200001F.j.08.1.P.Seq	F	M00042738:410	CH15CON
1291	639667	RTA22200015F.f.11.1.P.Seq	F	M00057079:59	CH16COP
1292	549829	RTA22200024F.e.11.1.P.Seq	F	M00055181:51	CH17COHLV
1293	553158	RTA22200021F.f.02.3.P.Seq	F	M00054752:17	CH17COHLV
1294	561485	RTA22200026F.d.14.1.P.Seq	F	M00055421:311	CH17COHLV
1295	639352	RTA22200002F.l.04.1.P.Seq	F	M00055528:66	CH15CON
1296	451401	RTA22200018F.h.16.1.P.Seq	F	M00043317:64	CH17COHLV
1297	643103	RTA22200001F.l.19.1.P.Seq	F	M00042893:38	CH15CON
1298	468736	RTA22200001F.j.23.1.P.Seq	F	M00042746:62	CH15CON
1299	218416	RTA22200004F.b.09.1.P.Seq	F	M00055744:38	CH15CON
1300	447501	RTA22200002F.d.24.1.P.Seq	F	M00055453:51	CH15CON
1301	558371	RTA22200024F.m.15.1.P.Seq	F	M00055242:44	CH17COHLV
1302	561794	RTA22200015F.f.14.1.P.Seq	F	M00057080:32	CH16COP
1303	645065	RTA22200004F.b.15.1.P.Seq	F	M00055744:78	CH15CON
1304	451269	RTA22200001F.b.05.1.P.Seq	F	M00042534:27	CH15CON
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1308	463480	RTA22200001F.i.08.1.P.Seq	F	M00042727:812	CH15CON
1309	549178	RTA22200022F.n.07.1.P.Seq	F	M00054981:511	CH17COHLV
1310	374450	RTA22200003F.d.02.1.P.Seq	F	M00055601:49	CH15CON
1311	562835	RTA22200009F.o.07.1.P.Seq	F	M00042864:55	CH16COP
1312	730555	RTA22200014F.j.23.2.P.Seq	F	M00056997:89	CH16COP
1313	732978	RTA22200015F.f.09.1.P.Seq	F	M00057078:312	CH16COP
1314	1609	RTA22200001F.k.16.1.P.Seq	F	M00042883:612	CH15CON
1315	18591	RTA22200015F.c.09.1.P.Seq	F	M00057058:69	CH16COP
1316	553158	RTA22200021F.f.12.3.P.Seq	F	M00054759:28	CH17COHLV
1317	470602	RTA22200024F.i.03.1.P.Seq	F	M00055206:84	CH17COHLV
1318	639662	RTA22200003F.d.14.1.P.Seq	F	M00055609:612	CH15CON
1319	644721	RTA22200004F.p.13.1.P.Seq	F	M00055839:69	CH15CON
1320	453202	RTA22200025F.n.08.2.P.Seq	F	M00055390:48	CH17COHLV
1321	554655	RTA22200015F.e.19.1.P.Seq	F	M00057073:15	CH16COP
1322	641988	RTA22200002F.c.20.1.P.Seq	F	M00055446:26	CH15CON
1323	453112	RTA22200001F.f.24.1.P.Seq	F	M00042700:43	CH15CON
1324	550694	RTA22200020F.c.09.1.P.Seq	F	M00054583:65	CH17COHLV
1325	649106	RTA22200004F.h.02.1.P.Seq	F	M00055788:13	CH15CON
1326	638973	RTA22200002F.g.14.1.P.Seq	F	M00055494:39	CH15CON
1327	549911	RTA22200024F.h.16.1.P.Seq	F	M00055203:82	CH17COHLV
1328	648774	RTA22200013F.o.21.1.P.Seq	F	M00056909:511	CH16COP
1329	549911	RTA22200024F.g.03.1.P.Seq	F	M00055194:35	CH17COHLV
1330	639662	RTA22200003F.a.10.1.P.Seq	F	M00055572:212	CH15CON
1331	560455	RTA22200024F.l.03.1.P.Seq	F	M00055231:410	CH17COHLV
1332	735805	RTA22200016F.d.23.1.P.Seq	F	M00057191:13	CH16COP
1333	732712	RTA22200014F.p.03.2.P.Seq	F	M00057029:16	CH16COP
1334	446663	RTA22200026F.f.10.1.P.Seq	F	M00055479:72	CH17COHLV
1335	226324	RTA22200024F.e.17.1.P.Seq	F	M00055182:37	CH17COHLV
1336	453016	RTA22200013F.m.14.1.P.Seq	F	M00056893:86	CH16COP
1337	550998	RTA22200016F.d.20.1.P.Seq	F	M00057189:75	CH16COP
1338	452414	RTA22200008F.d.21.1.P.Seq	F	M00056331:41	CH15CON
1339	129535	RTA22200003F.a.13.1.P.Seq	F	M00055572:63	CH15CON
1340	447089	RTA22200001F.c.04.1.P.Seq	F	M00042543:82	CH15CON
1341	447850	RTA22200021F.c.07.2.P.Seq	F	M00054732:53	CH17COHLV
1342	556216	RTA22200021F.l.05.3.P.Seq	F	M00054823:87	CH17COHLV
1343	452523	RTA22200003F.d.13.1.P.Seq	F	M00055609:73	CH15CON
1344	44424	RTA22200015F.i.23.1.P.Seq	F	M00057103:89	CH16COP
1345	648872	RTA22200004F.m.05.1.P.Seq	F	M00055817:48	CH15CON
1346	451636	RTA22200018F.e.12.1.P.Seq	F	M00043300:811	CH17COHLV
1347	5078	RTA22200024F.a.14.1.P.Seq	F	M00055145:67	CH17COHLV
1348	403111	RTA22200002F.g.21.1.P.Seq	F	M00055495:52	CH15CON
1349	648959	RTA22200002F.d.02.1.P.Seq	F	M00055448:48	CH15CON
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Table 1

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1354	450959	RTA22200018F.f.14.1.P.Seq	F	M00043306:27	CH17COHLV
1355	452833	RTA22200018F.d.24.1.P.Seq	F	M00042520:69	CH17COHLV
1356	550195	RTA22200020F.e.19.1.P.Seq	F	M00054602:34	CH17COHLV
1357	448927	RTA22200018F.l.10.1.P.Seq	F	M00043349:38	CH17COHLV
1358	551514	RTA22200020F.h.08.1.P.Seq	F	M00054629:59	CH17COHLV
1359	549829	RTA22200020F.f.14.1.P.Seq	F	M00054609:86	CH17COHLV
1360	551514	RTA22200025F.f.12.1.P.Seq	F	M00055327:88	CH17COHLV
1361	561485	RTA22200025F.i.07.1.P.Seq	F	M00055358:31	CH17COHLV
1362	453846	RTA22200025F.k.20.1.P.Seq	F	M00055376:21	CH17COHLV
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1364	727181	RTA22200011F.d.23.1.P.Seq	F	M00056555:69	CH16COP
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1366	725994	RTA22200011F.b.07.1.P.Seq	F	M00056534:411	CH16COP
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1368	5665	RTA22200233F.n.01.1.P.Seq	F	M00021654:14	CH03MAH
1369	5665	RTA22200233F.m.24.1.P.Seq	F	M00021654:14	CH03MAH
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1382	551380	RTA22200018F.p.22.1.P.Seq	F	M00043381:510	CH17COHLV
1383	546642	RTA22200014F.o.20.1.P.Seq	F	M00057029:312	CH16COP
1384	1764	RTA22200228F.c.06.1.P.Seq	F	M00006789:111	CH02COH
1385	650773	RTA22200005F.c.05.1.P.Seq	F	M00055864:511	CH15CON
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1387	185718	RTA22200242F.m.05.1.P.Seq	F	M00027051:17	CH04MAL
1388	5538	RTA22200227F.k.23.1.P.Seq	F	M00006712:62	CH02COH
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1390	727789	RTA22200014F.b.21.1.P.Seq	F	M00056939:68	CH16COP
1391	3837	RTA22200232F.m.13.1.P.Seq	F	M00022137:74	CH03MAH
1392	380477	RTA22200007F.d.03.1.P.Seq	F	M00056162:46	CH15CON
1393	3299	RTA22200238F.a.22.1.P.Seq	F	M00022861:210	CH03MAH
1394	448853	RTA22200009F.b.12.2.P.Seq	F	M00042463:69	CH16COP
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1398	732712	RTA22200013F.l.11.1.P.Seq	F	M00056883:17	CH16COP
1399	3765	RTA22200227F.o.19.1.P.Seq	F	M00006755:14	CH02COH
1400	185596	RTA22200243F.j.05.1.P.Seq	F	M00027134:72	CH04MAL
1401	1943	RTA22200233F.e.19.1.P.Seq	F	M00008065:25	CH03MAH
1402	448193	RTA22200009F.d.18.2.P.Seq	F	M00042764:24	CH16COP
1403	1793	RTA22200235F.d.08.1.P.Seq	F	M00022444:311	CH03MAH
1404	2475	RTA22200243F.c.22.1.P.Seq	F	M00027096:77	CH04MAL
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1406	730389	RTA22200013F.k.10.1.P.Seq	F	M00056874:86	CH16COP
1407	641884	RTA22200003F.m.17.1.P.Seq	F	M00055705:77	CH15CON
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1409	5156	RTA22200225F.m.12.1.P.Seq	F	M00005516:86	CH02COH
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1411	73812	RTA22200242F.m.20.1.P.Seq	F	M00027054:23	CH04MAL
1412	1662	RTA22200231F.n.18.1.P.Seq	F	M00007994:15	CH03MAH
1413	736556	RTA22200012F.c.09.1.P.Seq	F	M00056683:29	CH16COP
1414	5240	RTA22200230F.i.16.1.P.Seq	F	M00007172:33	CH02COH
1415	6184	RTA22200230F.a.11.1.P.Seq	F	M00007096:82	CH02COH
1416	446404	RTA22200007F.m.11.1.P.Seq	F	M00056253:86	CH15CON
1417	646825	RTA22200005F.m.17.1.P.Seq	F	M00055951:32	CH15CON
1418	734929	RTA22200011F.i.01.1.P.Seq	F	M00056592:47	CH16COP
1419	648851	RTA22200007F.e.21.1.P.Seq	F	M00056185:13	CH15CON
1420	640135	RTA22200014F.o.14.2.P.Seq	F	M00057027:76	CH16COP
1421	7443	RTA22200234F.p.21.1.P.Seq	F	M00022411:712	CH03MAH
1422	454050	RTA22200007F.h.03.1.P.Seq	F	M00056206:56	CH15CON
1423	3765	RTA22200226F.l.11.1.P.Seq	F	M00005766:610	CH02COH
1424	648320	RTA22200003F.p.03.1.P.Seq	F	M00055726:710	CH15CON
1425	451269	RTA22200005F.g.17.1.P.Seq	F	M00055889:812	CH15CON
1426	535208	RTA22200005F.h.10.1.P.Seq	F	M00055896:611	CH15CON
1427	728115	RTA22200012F.i.04.1.P.Seq	F	M00056724:511	CH16COP
1428	5240	RTA22200228F.b.08.1.P.Seq	F	M00006783:67	CH02COH
1429	909	RTA22200233F.d.12.1.P.Seq	F	M00008043:211	CH03MAH
1430	447697	RTA22200001F.m.18.1.P.Seq	F	M00042905:611	CH15CON
1431	447737	RTA22200005F.k.16.1.P.Seq	F	M00055930:28	CH15CON
1432	651100	RTA22200010F.d.03.1.P.Seq	F	M00056371:612	CH16COP
1433	735477	RTA22200010F.d.20.1.P.Seq	F	M00056383:310	CH16COP
1434	3774	RTA22200230F.c.04.1.P.Seq	F	M00007110:63	CH02COH
1435	646146	RTA22200006F.a.09.2.P.Seq	F	M00055997:711	CH15CON
1436	643931	RTA22200005F.j.20.1.P.Seq	F	M00055921:211	CH15CON
1437	463487	RTA22200013F.h.14.1.P.Seq	F	M00056857:39	CH16COP
1438	650097	RTA22200016F.h.08.1.P.Seq	F	M00057218:31	CH16COP
1439	554469	RTA22200012F.o.20.1.P.Seq	F	M00056777:22	CH16COP
1440	476223	RTA22200010F.a.21.1.P.Seq	F	M00056356:64	CH16COP

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SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
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1443	185539	RTA22200240F.f.19.1.P.Seq	F	M00023377:39	CH04MAL
1444	451811	RTA22200001F.p.04.1.P.Seq	F	M00054913:73	CH15CON
1445	140731	RTA22200015F.n.18.1.P.Seq	F	M00057133:61	CH16COP
1446	734582	RTA22200013F.c.12.1.P.Seq	F	M00056816:110	CH16COP
1447	463487	RTA22200001F.e.05.1.P.Seq	F	M00042565:83	CH15CON
1448	558719	RTA22200004F.d.17.1.P.Seq	F	M00055766:83	CH15CON
1449	21669	RTA22200023F.j.14.1.P.Seq	F	M00055073:812	CH17COHLV
1450	470462	RTA22200006F.b.13.2.P.Seq	F	M00056005:55	CH15CON
1451	3316	RTA22200022F.i.09.1.P.Seq	F	M00054943:34	CH17COHLV
1452	553728	RTA22200021F.e.07.3.P.Seq	F	M00054747:61	CH17COHLV
1453	736014	RTA22200016F.p.01.1.P.Seq	F	M00057279:72	CH16COP
1454	237288	RTA22200002F.m.12.1.P.Seq	F	M00055538:811	CH15CON
1455	11141	RTA22200226F.m.20.1.P.Seq	F	M00005782:210	CH02COH
1456	556421	RTA22200022F.k.11.1.P.Seq	F	M00054957:22	CH17COHLV
1457	549435	RTA22200006F.h.16.2.P.Seq	F	M00056055:43	CH15CON
1458	448927	RTA22200009F.g.08.1.P.Seq	F	M00042792:710	CH16COP
1459	379105	RTA22200023F.o.09.1.P.Seq	F	M00055121:37	CH17COHLV
1460	552614	RTA22200020F.m.20.1.P.Seq	F	M00054680:56	CH17COHLV
1461	470602	RTA22200004F.l.04.1.P.Seq	F	M00055807:34	CH15CON
1462	557039	RTA22200022F.o.03.1.P.Seq	F	M00054988:72	CH17COHLV
1463	549864	RTA22200022F.k.06.1.P.Seq	F	M00054954:33	CH17COHLV
1464	449836	RTA22200017F.a.23.1.P.Seq	F	M00057301:812	CH16COP
1465	554812	RTA22200023F.m.06.1.P.Seq	F	M00055094:89	CH17COHLV
1466	3316	RTA22200021F.l.17.3.P.Seq	F	M00054827:81	CH17COHLV
1467	649852	RTA22200003F.l.09.1.P.Seq	F	M00055689:712	CH15CON
1468	453592	RTA22200001F.g.17.1.P.Seq	F	M00042705:42	CH15CON
1469	455096	RTA22200026F.g.02.1.P.Seq	F	M00055482:11	CH17COHLV
1470	446199	RTA22200009F.n.08.1.P.Seq	F	M00042855:29	CH16COP
1471	558427	RTA22200024F.m.11.1.P.Seq	F	M00055242:56	CH17COHLV
1472	450255	RTA22200021F.j.13.3.P.Seq	F	M00054810:82	CH17COHLV
1473	452026	RTA22200003F.l.10.1.P.Seq	F	M00055689:62	CH15CON
1474	374971	RTA22200024F.p.11.1.P.Seq	F	M00055260:612	CH17COHLV
1475	446404	RTA22200003F.l.04.1.P.Seq	F	M00055686:511	CH15CON
1476	549591	RTA22200025F.p.19.2.P.Seq	F	M00055404:37	CH17COHLV
1477	640135	RTA22200014F.o.14.3.P.Seq	F	M00057027:76	CH16COP
1478	646248	RTA22200016F.k.06.1.P.Seq	F	M00057239:78	CH16COP
1479	639705	RTA22200004F.e.05.1.P.Seq	F	M00055770:71	CH15CON
1480	483084	RTA22200004F.m.03.1.P.Seq	F	M00055817:61	CH15CON
1481	464029	RTA22200026F.b.04.1.P.Seq	F	M00055408:63	CH17COHLV
1482	428005	RTA22200021F.c.03.2.P.Seq	F	M00054731:312	CH17COHLV
1483	91178	RTA22200024F.o.02.1.P.Seq	F	M00055252:32	CH17COHLV
1484	550571	RTA22200024F.k.21.1.P.Seq	F	M00055227:57	CH17COHLV
1485	735028	RTA22200015F.e.10.1.P.Seq	F	M00057070:28	CH16COP

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1488	648872	RTA22200002F.g.23.1.P.Seq	F	M00055496:69	CH15CON
1489	446404	RTA22200001F.l.03.1.P.Seq	F	M00042887:47	CH15CON
1490	734063	RTA22200016F.j.24.1.P.Seq	F	M00057237:211	CH16COP
1491	467991	RTA22200008F.c.22.1.P.Seq	F	M00056320:82	CH15CON
1492	454050	RTA22200008F.d.06.1.P.Seq	F	M00056323:312	CH15CON
1493	734646	RTA22200015F.j.06.1.P.Seq	F	M00057104:68	CH16COP
1494	450192	RTA22200018F.n.06.1.P.Seq	F	M00043361:45	CH17COHLV
1495	403978	RTA22200018F.f.01.1.P.Seq	F	M00043304:35	CH17COHLV
1496	734209	RTA22200016F.c.16.1.P.Seq	F	M00057174:36	CH16COP
1497	14805	RTA22200021F.o.12.2.P.Seq	F	M00054856:12	CH17COHLV
1498	230995	RTA22200020F.f.01.1.P.Seq	F	M00054604:49	CH17COHLV
1499	120049	RTA22200020F.e.18.1.P.Seq	F	M00054601:58	CH17COHLV
1500	642142	RTA22200004F.f.16.1.P.Seq	F	M00055780:27	CH15CON
1501	403978	RTA22200018F.e.24.1.P.Seq	F	M00043304:35	CH17COHLV
1502	386543	RTA22200018F.g.02.1.P.Seq	F	M00043309:87	CH17COHLV
1503	379105	RTA22200018F.a.14.1.P.Seq	F	M00042355:72	CH17COHLV
1504	450255	RTA22200018F.c.16.1.P.Seq	F	M00042455:411	CH17COHLV
1505	730143	RTA22200011F.a.03.1.P.Seq	F	M00056526:511	CH16COP
1506	734209	RTA22200010F.m.02.1.P.Seq	F	M00056496:11	CH16COP
1507	401553	RTA22200010F.m.16.1.P.Seq	F	M00056501:87	CH16COP
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1509	726307	RTA22200010F.o.16.1.P.Seq	F	M00056512:312	CH16COP
1510	230995	RTA22200019F.b.14.1.P.Seq	F	M00043397:29	CH17COHLV
1511	3524	RTA22200227F.f.19.1.P.Seq	F	M00006650:13	CH02COH
1512	8112	RTA22200237F.m.13.1.P.Seq	F	M00022823:43	CH03MAH
1513	5240	RTA22200237F.m.05.1.P.Seq	F	M00022820:36	CH03MAH
1514	447326	RTA22200005F.c.22.1.P.Seq	F	M00055868:69	CH15CON
1515	2676	RTA22200227F.k.01.1.P.Seq	F	M00006695:88	CH02COH
1516	736701	RTA22200014F.e.11.1.P.Seq	F	M00056955:79	CH16COP
1517	736701	RTA22200014F.e.11.2.P.Seq	F	M00056955:79	CH16COP
1518	8371	RTA22200229F.a.07.1.P.Seq	F	M00006921:88	CH02COH
1519	8336	RTA22200235F.f.24.1.P.Seq	F	M00022470:71	CH03MAH
1520	185542	RTA22200248F.h.05.1.P.Seq	F	M00027564:43	CH04MAL
1521	448046	RTA22200014F.d.13.1.P.Seq	F	M00056951:69	CH16COP
1522	185422	RTA22200242F.j.15.1.P.Seq	F	M00027034:411	CH04MAL
1523	650448	RTA22200005F.c.17.1.P.Seq	F	M00055868:66	CH15CON
1524	5753	RTA22200227F.n.02.1.P.Seq	F	M00006737:111	CH02COH
1525	8001	RTA22200222F.a.01.1.P.Seq	F	M00001340:51	CH01COH
1526	1644	RTA22200240F.j.17.1.P.Seq	F	M00023430:410	CH04MAL
1527	4453	RTA22200237F.o.18.1.P.Seq	F	M00022836:73	CH03MAH
1528	454152	RTA22200020F.j.08.1.P.Seq	F	M00054646:21	CH17COHLV
1529	9913	RTA22200231F.m.19.1.P.Seq	F	M00007991:71	CH03MAH
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1534	185465	RTA22200248F.j.08.1.P.Seq	F	M00027578:54	CH04MAL
1535	19205	RTA22200244F.b.14.1.P.Seq	F	M00027171:27	CH04MAL
1536	185635	RTA22200242F.l.11.1.P.Seq	F	M00027046:55	CH04MAL
1537	5289	RTA22200235F.o.06.2.P.Seq	F	M00022559:49	CH03MAH
1538	779	RTA22200238F.f.01.1.P.Seq	F	M00022901:511	CH03MAH
1539	779	RTA22200238F.e.24.1.P.Seq	F	M00022901:511	CH03MAH
1540	5289	RTA22200235F.m.20.2.P.Seq	F	M00022550:24	CH03MAH
1541	456808	RTA22200013F.d.22.1.P.Seq	F	M00056823:17	CH16COP
1542	646620	RTA22200007F.n.14.1.P.Seq	F	M00056267:22	CH15CON
1543	546642	RTA22200013F.d.21.1.P.Seq	F	M00056823:25	CH16COP
1544	649732	RTA22200003F.n.10.1.P.Seq	F	M00055716:24	CH15CON
1545	5240	RTA22200231F.f.05.1.P.Seq	F	M00007953:89	CH03MAH
1546	448046	RTA22200009F.c.06.2.P.Seq	F	M00042511:14	CH16COP
1547	650476	RTA22200008F.f.07.1.P.Seq	F	M00056447:14	CH15CON
1548	379341	RTA22200016F.n.21.1.P.Seq	F	M00057272:84	CH16COP
1549	401849	RTA22200003F.p.02.1.P.Seq	F	M00055726:412	CH15CON
1550	11452	RTA22200227F.f.18.1.P.Seq	F	M00006649:211	CH02COH
1551	185417	RTA22200242F.b.12.1.P.Seq	F	M00026977:59	CH04MAL
1552	4471	RTA22200232F.c.20.1.P.Seq	F	M00021925:810	CH03MAH
1553	2557	RTA22200228F.e.11.1.P.Seq	F	M00006810:411	CH02COH
1554	3656	RTA22200227F.f.01.1.P.Seq	F	M00006641:83	CH02COH
1555	2327	RTA22200241F.i.20.1.P.Seq	F	M00026917:83	CH04MAL
1556	449026	RTA22200009F.o.17.1.P.Seq	F	M00042867:81	CH16COP
1557	730227	RTA22200013F.n.03.1.P.Seq	F	M00056896:610	CH16COP
1558	650864	RTA22200006F.e.08.2.P.Seq	F	M00056028:63	CH15CON
1559	530774	RTA22200004F.j.19.1.P.Seq	F	M00055803:111	CH15CON
1560	395341	RTA22200011F.g.06.1.P.Seq	F	M00056580:610	CH16COP
1561	557906	RTA22200004F.a.07.1.P.Seq	F	M00055735:75	CH15CON
1562	452531	RTA22200009F.l.08.2.P.Seq	F	M00042842:58	CH16COP
1563	559057	RTA22200021F.e.09.3.P.Seq	F	M00054747:36	CH17COHLV
1564	448046	RTA22200014F.d.13.2.P.Seq	F	M00056951:69	CH16COP
1565	553547	RTA22200022F.g.22.1.P.Seq	F	M00054935:51	CH17COHLV
1566	4636	RTA22200231F.e.20.1.P.Seq	F	M00007953:11	CH03MAH
1567	455601	RTA22200006F.f.06.2.P.Seq	F	M00056037:22	CH15CON
1568	172013	RTA22200002F.c.05.1.P.Seq	F	M00055441:42	CH15CON
1569	552597	RTA22200013F.a.02.1.P.Seq	F	M00056791:612	CH16COP
1570	446531	RTA22200001F.c.11.1.P.Seq	F	M00042547:411	CH15CON
1571	639352	RTA22200008F.a.09.1.P.Seq	F	M00056293:79	CH15CON
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1573	558534	RTA22200008F.c.04.1.P.Seq	F	M00056310:76	CH15CON
1574	556421	RTA22200026F.b.02.1.P.Seq	F	M00055408:59	CH17COHLV
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1578	557797	RTA22200004F.e.07.1.P.Seq	F	M00055771:111	CH15CON
1579	557200	RTA22200021F.b.08.2.P.Seq	F	M00054727:510	CH17COHLV
1580	729531	RTA22200015F.h.06.1.P.Seq	F	M00057091:512	CH16COP
1581	734554	RTA22200014F.o.09.2.P.Seq	F	M00057024:88	CH16COP
1582	418008	RTA22200020F.e.16.1.P.Seq	F	M00054601:810	CH17COHLV
1583	558614	RTA22200024F.k.16.1.P.Seq	F	M00055227:89	CH17COHLV
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1585	449891	RTA22200019F.b.13.1.P.Seq	F	M00043397:22	CH17COHLV
1586	547916	RTA22200011F.a.18.1.P.Seq	F	M00056529:612	CH16COP
1587	6162	RTA22200233F.l.19.1.P.Seq	F	M00021628:211	CH03MAH
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1589	4809	RTA22200224F.d.21.1.P.Seq	F	M00004868:412	CH02COH
1590	3926	RTA22200242F.d.18.1.P.Seq	F	M00026993:86	CH04MAL
1591	185693	RTA22200248F.d.20.1.P.Seq	F	M00027532:32	CH04MAL
1592	641683	RTA22200007F.m.16.1.P.Seq	F	M00056256:811	CH15CON
1593	11351	RTA22200226F.o.18.1.P.Seq	F	M00005818:29	CH02COH
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1601	540787	RTA22200002F.m.10.1.P.Seq	F	M00055536:56	CH15CON
1602	400654	RTA22200003F.n.13.1.P.Seq	F	M00055718:65	CH15CON
1603	731467	RTA22200016F.f.21.1.P.Seq	F	M00057208:36	CH16COP
1604	4045	RTA22200232F.g.23.1.P.Seq	F	M00022052:18	CH03MAH
1605	447669	RTA22200011F.l.23.1.P.Seq	F	M00056628:61	CH16COP
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1608	726786	RTA22200016F.e.08.1.P.Seq	F	M00057192:72	CH16COP
1609	4508	RTA22200226F.o.02.1.P.Seq	F	M00005810:710	CH02COH
1610	415058	RTA22200022F.h.07.1.P.Seq	F	M00054937:23	CH17COHLV
1611	450633	RTA22200006F.l.11.2.P.Seq	F	M00056085:811	CH15CON
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1613	729851	RTA22200013F.h.15.1.P.Seq	F	M00056858:23	CH16COP
1614	2512	RTA22200235F.c.11.1.P.Seq	F	M00022430:410	CH03MAH
1615	452704	RTA22200008F.f.21.1.P.Seq	F	M00056456:61	CH15CON
1616	4589	RTA22200230F.c.15.1.P.Seq	F	M00007117:83	CH02COH
1617	4727	RTA22200233F.e.16.1.P.Seq	F	M00008059:28	CH03MAH
1618	454380	RTA22200014F.d.23.1.P.Seq	F	M00056953:16	CH16COP
1619	553912	RTA22200021F.j.04.3.P.Seq	F	M00054808:47	CH17COHLV
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Table 1

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1623	448511	RTA22200023F.b.05.1.P.Seq	F	M00055021:411	CH17COHLV
1624	335	RTA22200012F.l.18.1.P.Seq	F	M00056753:110	CH16COP
1625	561382	RTA22200026F.c.05.1.P.Seq	F	M00055413:27	CH17COHLV
1626	3447	RTA22200227F.k.15.1.P.Seq	F	M00006705:19	CH02COH
1627	639896	RTA22200012F.c.15.1.P.Seq	F	M00056684:611	CH16COP
1628	1353	RTA22200241F.e.20.1.P.Seq	F	M00026890:42	CH04MAL
1629	3031	RTA22200229F.i.23.1.P.Seq	F	M00006996:610	CH02COH
1630	557928	RTA22200021F.g.03.3.P.Seq	F	M00054765:35	CH17COHLV
1631	4727	RTA22200237F.n.09.1.P.Seq	F	M00022829:810	CH03MAH
1632	4046	RTA22200226F.g.16.1.P.Seq	F	M00005655:68	CH02COH
1633	10882	RTA22200241F.b.11.1.P.Seq	F	M00026861:19	CH04MAL
1634	646283	RTA22200007F.c.22.1.P.Seq	F	M00056161:74	CH15CON
1635	646283	RTA22200002F.d.05.1.P.Seq	F	M00055448:57	CH15CON
1636	139516	RTA22200242F.e.16.1.P.Seq	F	M00027000:65	CH04MAL
1637	6184	RTA22200230F.e.13.1.P.Seq	F	M00007131:11	CH02COH
1638	6184	RTA22200228F.c.12.1.P.Seq	F	M00006795:13	CH02COH
1639	454653	RTA22200013F.e.17.1.P.Seq	F	M00056830:72	CH16COP
1640	3309	RTA22200232F.c.11.1.P.Seq	F	M00021911:83	CH03MAH
1641	1037	RTA22200248F.e.02.1.P.Seq	F	M00027535:58	CH04MAL
1642	450665	RTA22200002F.g.06.1.P.Seq	F	M00055491:78	CH15CON
1643	726307	RTA22200016F.b.16.1.P.Seq	F	M00057167:512	CH16COP
1644	447669	RTA22200001F.b.14.1.P.Seq	F	M00042538:56	CH15CON
1645	639651	RTA22200003F.b.15.1.P.Seq	F	M00055584:76	CH15CON
1646	736860	RTA22200015F.b.11.1.P.Seq	F	M00057049:76	CH16COP
1647	553705	RTA22200025F.j.22.1.P.Seq	F	M00055371:61	CH17COHLV
1648	451375	RTA22200018F.j.20.1.P.Seq	F	M00043336:58	CH17COHLV
1649	204862	RTA22200006F.h.24.2.P.Seq	F	M00056058:84	CH15CON
1650	530883	RTA22200011F.o.17.1.P.Seq	F	M00056652:64	CH16COP
1651	447539	RTA22200001F.e.22.1.P.Seq	F	M00042575:41	CH15CON
1652	455096	RTA22200020F.m.23.1.P.Seq	F	M00054680:211	CH17COHLV
1653	8336	RTA22200235F.g.01.1.P.Seq	F	M00022470:71	CH03MAH
1654	449142	RTA22200006F.f.09.2.P.Seq	F	M00056041:34	CH15CON
1655	557401	RTA22200003F.j.04.1.P.Seq	F	M00055668:27	CH15CON
1656	418763	RTA22200002F.e.07.1.P.Seq	F	M00055454:75	CH15CON
1657	17649	RTA22200238F.b.23.1.P.Seq	F	M00022876:48	CH03MAH
1658	2078	RTA22200238F.h.11.1.P.Seq	F	M00022928:63	CH03MAH
1659	640370	RTA22200010F.g.14.1.P.Seq	F	M00056410:54	CH16COP
1660	449269	RTA22200005F.h.22.1.P.Seq	F	M00055906:410	CH15CON
1661	639029	RTA22200006F.o.10.2.P.Seq	F	M00056114:36	CH15CON
1662	448677	RTA22200023F.l.07.1.P.Seq	F	M00055088:59	CH17COHLV
1663	349	RTA22200233F.a.09.1.P.Seq	F	M00008014:21	CH03MAH
1664	447494	RTA22200002F.e.05.1.P.Seq	F	M00055454:811	CH15CON
1665	551433	RTA22200021F.k.12.3.P.Seq	F	M00054816:411	CH17COHLV

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SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
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1668	640525	RTA22200002F.m.24.1.P.Seq	F	M00055543:35	CH15CON
1669	233108	RTA22200002F.p.10.1.P.Seq	F	M00055560:212	CH15CON
1670	643594	RTA22200003F.l.06.1.P.Seq	F	M00055687:61	CH15CON
1671	1642	RTA22200231F.a.18.1.P.Seq	F	M00007931:110	CH03MAH
1672	643804	RTA22200003F.h.09.1.P.Seq	F	M00055656:59	CH15CON
1673	449701	RTA22200012F.h.22.1.P.Seq	F	M00056723:311	CH16COP
1674	185695	RTA22200242F.c.21.1.P.Seq	F	M00026986:810	CH04MAL
1675	555830	RTA22200003F.k.13.1.P.Seq	F	M00055679:17	CH15CON
1676	227936	RTA22200010F.n.11.1.P.Seq	F	M00056505:47	CH16COP
1677	1609	RTA22200226F.g.09.1.P.Seq	F	M00005650:16	CH02COH
1678	643938	RTA22200005F.o.22.1.P.Seq	F	M00055980:110	CH15CON
1679	3656	RTA22200227F.e.24.1.P.Seq	F	M00006641:83	CH02COH
1680	16576	RTA22200248F.e.07.1.P.Seq	F	M00027536:712	CH04MAL
1681	9784	RTA22200243F.c.16.1.P.Seq	F	M00027093:28	CH04MAL
1682	2557	RTA22200228F.p.12.2.P.Seq	F	M00006917:48	CH02COH
1683	4620	RTA22200237F.o.15.1.P.Seq	F	M00022834:71	CH03MAH
1684	43642	RTA22200021F.p.23.2.P.Seq	F	M00054865:84	CH17COHLV
1685	555103	RTA22200016F.l.08.1.P.Seq	F	M00057249:36	CH16COP
1686	643341	RTA22200002F.g.16.1.P.Seq	F	M00055495:72	CH15CON
1687	185531	RTA22200248F.l.12.1.P.Seq	F	M00027588:31	CH04MAL
1688	4045	RTA22200224F.b.17.1.P.Seq	F	M00004842:27	CH02COH
1689	400258	RTA22200011F.e.10.1.P.Seq	F	M00056557:42	CH16COP
1690	96618	RTA22200248F.j.22.1.P.Seq	F	M00027581:51	CH04MAL
1691	646060	RTA22200007F.p.23.1.P.Seq	F	M00056291:71	CH15CON
1692	5665	RTA22200232F.a.17.1.P.Seq	F	M00021854:57	CH03MAH
1693	149265	RTA22200241F.o.03.1.P.Seq	F	M00026951:43	CH04MAL
1694	727314	RTA22200012F.g.14.1.P.Seq	F	M00056714:86	CH16COP
1695	736349	RTA22200014F.d.03.1.P.Seq	F	M00056947:69	CH16COP
1696	648931	RTA22200006F.k.13.2.P.Seq	F	M00056081:25	CH15CON
1697	553881	RTA22200003F.m.10.1.P.Seq	F	M00055703:79	CH15CON
1698	7444	RTA22200235F.d.02.1.P.Seq	F	M00022440:41	CH03MAH
1699	150	RTA22200235F.p.14.2.P.Seq	F	M00022571:411	CH03MAH
1700	2889	RTA22200228F.p.09.2.P.Seq	F	M00006917:15	CH02COH
1701	730670	RTA22200013F.a.09.1.P.Seq	F	M00056793:87	CH16COP
1702	560984	RTA22200021F.n.20.2.P.Seq	F	M00054851:53	CH17COHLV
1703	453708	RTA22200026F.e.10.1.P.Seq	F	M00055425:35	CH17COHLV
1704	48977	RTA22200024F.p.08.1.P.Seq	F	M00055259:64	CH17COHLV
1705	547916	RTA22200008F.g.01.1.P.Seq	F	M00056459:37	CH15CON
1706	547916	RTA22200008F.f.24.1.P.Seq	F	M00056459:37	CH15CON
1707	97507	RTA22200023F.p.11.1.P.Seq	F	M00055134:82	CH17COHLV
1708	735966	RTA22200012F.n.08.1.P.Seq	F	M00056766:110	CH16COP
1709	35	RTA22200012F.m.20.1.P.Seq	F	M00056760:14	CH16COP
1710	650195	RTA22200002F.m.11.1.P.Seq	F	M00055536:63	CH15CON

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
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1713	378525	RTA22200015F.h.03.1.P.Seq	F	M00057091:33	CH16COP
1714	2889	RTA22200228F.p.10.2.P.Seq	F	M00006917:14	CH02COH
1715	557686	RTA22200025F.f.19.1.P.Seq	F	M00055334:89	CH17COHLV
1716	735786	RTA22200010F.h.02.1.P.Seq	F	M00056414:15	CH16COP
1717	455145	RTA22200003F.f.10.1.P.Seq	F	M00055636:610	CH15CON
1718	639667	RTA22200002F.k.13.1.P.Seq	F	M00055525:27	CH15CON
1719	446913	RTA22200001F.m.21.1.P.Seq	F	M00042905:310	CH15CON
1720	402494	RTA22200014F.c.09.2.P.Seq	F	M00056941:52	CH16COP
1721	734256	RTA22200014F.l.11.1.P.Seq	F	M00057005:43	CH16COP
1722	734256	RTA22200012F.g.05.1.P.Seq	F	M00056711:15	CH16COP
1723	559362	RTA22200023F.n.21.1.P.Seq	F	M00055115:55	CH17COHLV
1724	639651	RTA22200003F.c.22.1.P.Seq	F	M00055597:58	CH15CON
1725	419774	RTA22200008F.g.11.1.P.Seq	F	M00056466:52	CH15CON
1726	555318	RTA22200025F.a.17.1.P.Seq	F	M00055271:35	CH17COHLV
1727	449956	RTA22200010F.b.08.1.P.Seq	F	M00056359:111	CH16COP
1728	558427	RTA22200015F.p.12.1.P.Seq	F	M00057146:39	CH16COP
1729	7531	RTA22200225F.j.13.1.P.Seq	F	M00005491:812	CH02COH
1730	446514	RTA22200001F.a.16.1.P.Seq	F	M00042527:47	CH15CON
1731	456808	RTA22200010F.o.15.1.P.Seq	F	M00056512:59	CH16COP
1732	447035	RTA22200003F.f.08.1.P.Seq	F	M00055635:510	CH15CON
1733	446913	RTA22200001F.j.16.1.P.Seq	F	M00042742:16	CH15CON
1734	446900	RTA22200022F.g.20.1.P.Seq	F	M00054934:43	CH17COHLV
1735	504513	RTA22200003F.f.07.1.P.Seq	F	M00055635:810	CH15CON
1736	380477	RTA22200014F.j.09.1.P.Seq	F	M00056993:26	CH16COP
1737	1213	RTA22200244F.p.13.1.P.Seq	F	M00027231:13	CH04MAL
1738	8259	RTA22200222F.l.14.1.P.Seq	F	M00004093:310	CH01COH
1739	8259	RTA22200222F.h.23.1.P.Seq	F	M00003922:83	CH01COH
1740	552968	RTA22200019F.d.20.1.P.Seq	F	M00043503:38	CH17COHLV
1741	650845	RTA22200010F.o.09.1.P.Seq	F	M00056511:812	CH16COP
1742	648594	RTA22200014F.h.17.1.P.Seq	F	M00056977:73	CH16COP
1743	648594	RTA22200014F.h.17.2.P.Seq	F	M00056977:73	CH16COP
1744	2796	RTA22200240F.c.13.1.P.Seq	F	M00023331:111	CH04MAL
1745	5753	RTA22200227F.f.13.1.P.Seq	F	M00006648:15	CH02COH
1746	734256	RTA22200014F.l.11.2.P.Seq	F	M00057005:43	CH16COP
1747	449580	RTA22200007F.p.19.1.P.Seq	F	M00056290:58	CH15CON
1748	553705	RTA22200021F.a.23.2.P.Seq	F	M00054726:68	CH17COHLV
1749	730670	RTA22200011F.n.02.1.P.Seq	F	M00056638:21	CH16COP
1750	15035	RTA22200001F.c.07.1.P.Seq	F	M00042544:610	CH15CON
1751	394436	RTA22200002F.o.12.1.P.Seq	F	M00055552:39	CH15CON
1752	726810	RTA22200011F.h.22.1.P.Seq	F	M00056592:33	CH16COP
1753	352763	RTA22200022F.j.12.1.P.Seq	F	M00054949:17	CH17COHLV
1754	3506	RTA22200240F.i.14.1.P.Seq	F	M00023414:63	CH04MAL
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1758	13824	RTA22200234F.m.16.1.P.Seq	F	M00022370:72	CH03MAH
1759	558222	RTA22200019F.h.07.1.P.Seq	F	M00054502:41	CH17COHLV
1760	2834	RTA22200224F.p.09.1.P.Seq	F	M00005406:111	CH02COH
1761	453470	RTA22200001F.a.10.1.P.Seq	F	M00042523:35	CH15CON
1762	558682	RTA22200015F.o.16.1.P.Seq	F	M00057141:22	CH16COP
1763	641710	RTA22200016F.j.03.1.P.Seq	F	M00057231:79	CH16COP
1764	640221	RTA22200013F.k.12.1.P.Seq	F	M00056874:71	CH16COP
1765	559057	RTA22200016F.n.11.1.P.Seq	F	M00057270:89	CH16COP
1766	551433	RTA22200025F.m.12.2.P.Seq	F	M00055385:76	CH17COHLV
1767	5729	RTA22200228F.f.10.1.P.Seq	F	M00006819:25	CH02COH
1768	352763	RTA22200022F.g.09.1.P.Seq	F	M00054931:19	CH17COHLV
1769	375651	RTA22200012F.m.08.1.P.Seq	F	M00056757:63	CH16COP
1770	644032	RTA22200012F.m.04.1.P.Seq	F	M00056756:15	CH16COP
1771	185562	RTA22200240F.j.15.1.P.Seq	F	M00023428:611	CH04MAL
1772	736349	RTA22200014F.d.03.2.P.Seq	F	M00056947:69	CH16COP
1773	638870	RTA22200012F.h.13.1.P.Seq	F	M00056721:67	CH16COP
1774	649719	RTA22200012F.k.03.1.P.Seq	F	M00056739:48	CH16COP
1775	62016	RTA22200026F.d.09.1.P.Seq	F	M00055420:74	CH17COHLV
1776	2889	RTA22200229F.p.17.1.P.Seq	F	M00007084:74	CH02COH
1777	647135	RTA22200010F.k.08.1.P.Seq	F	M00056480:110	CH16COP
1778	8283	RTA22200224F.g.10.1.P.Seq	F	M00005309:55	CH02COH
1779	732121	RTA22200014F.d.06.1.P.Seq	F	M00056949:66	CH16COP
1780	532307	RTA22200022F.h.09.1.P.Seq	F	M00054937:112	CH17COHLV
1781	6589	RTA22200226F.n.24.1.P.Seq	F	M00005810:67	CH02COH
1782	554678	RTA22200010F.b.19.1.P.Seq	F	M00056363:26	CH16COP
1783	450410	RTA22200021F.a.09.2.P.Seq	F	M00054722:41	CH17COHLV
1784	643924	RTA22200002F.a.21.1.P.Seq	F	M00055427:61	CH15CON
1785	453719	RTA22200002F.a.17.1.P.Seq	F	M00055426:86	CH15CON
1786	451811	RTA22200003F.k.17.1.P.Seq	F	M00055681:72	CH15CON
1787	453059	RTA22200003F.b.22.1.P.Seq	F	M00055586:62	CH15CON
1788	453457	RTA22200021F.a.06.2.P.Seq	F	M00054721:611	CH17COHLV
1789	558454	RTA22200020F.a.20.1.P.Seq	F	M00054572:31	CH17COHLV
1790	417467	RTA22200025F.c.11.1.P.Seq	F	M00055289:42	CH17COHLV
1791	447850	RTA22200001F.a.23.1.P.Seq	F	M00042532:68	CH15CON
1792	557948	RTA22200024F.n.05.1.P.Seq	F	M00055245:19	CH17COHLV
1793	452685	RTA22200022F.b.14.1.P.Seq	F	M00054877:812	CH17COHLV
1794	446964	RTA22200019F.e.05.1.P.Seq	F	M00043504:78	CH17COHLV
1795	550318	RTA22200021F.d.04.2.P.Seq	F	M00054741:310	CH17COHLV
1796	407077	RTA22200023F.p.13.1.P.Seq	F	M00055134:23	CH17COHLV
1797	650864	RTA22200007F.o.19.1.P.Seq	F	M00056282:44	CH15CON
1798	644721	RTA22200003F.p.16.1.P.Seq	F	M00055731:812	CH15CON
1799	485431	RTA22200013F.l.17.1.P.Seq	F	M00056885:36	CH16COP
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1803	185478	RTA22200248F.j.05.1.P.Seq	F	M00027578:65	CH04MAL
1804	1441	RTA22200228F.j.04.2.P.Seq	F	M00006859:44	CH02COH
1805	640005	RTA22200002F.i.16.1.P.Seq	F	M00055511:59	CH15CON
1806	728273	RTA22200015F.h.04.1.P.Seq	F	M00057091:34	CH16COP
1807	185579	RTA22200242F.e.07.1.P.Seq	F	M00026996:16	CH04MAL
1808	724473	RTA22200012F.f.23.1.P.Seq	F	M00056711:31	CH16COP
1809	559674	RTA22200014F.h.06.1.P.Seq	F	M00056974:64	CH16COP
1810	456026	RTA22200005F.d.13.1.P.Seq	F	M00055873:53	CH15CON
1811	549320	RTA22200022F.a.02.1.P.Seq	F	M00054867:37	CH17COHLV
1812	447338	RTA22200001F.k.04.1.P.Seq	F	M00042746:29	CH15CON
1813	560700	RTA22200002F.b.09.1.P.Seq	F	M00055430:82	CH15CON
1814	3070	RTA22200021F.g.19.3.P.Seq	F	M00054769:67	CH17COHLV
1815	3070	RTA22200002F.f.03.1.P.Seq	F	M00055463:810	CH15CON
1816	380477	RTA22200014F.j.09.2.P.Seq	F	M00056993:26	CH16COP
1817	735040	RTA22200015F.b.05.1.P.Seq	F	M00057047:32	CH16COP
1818	378525	RTA22200009F.j.16.2.P.Seq	F	M00042826:33	CH16COP
1819	284586	RTA22200009F.c.23.2.P.Seq	F	M00042756:21	CH16COP
1820	640276	RTA22200014F.e.15.2.P.Seq	F	M00056956:61	CH16COP
1821	3344	RTA22200230F.j.07.1.P.Seq	F	M00007178:43	CH02COH
1822	555830	RTA22200005F.b.23.1.P.Seq	F	M00055861:43	CH15CON
1823	726307	RTA22200011F.i.10.1.P.Seq	F	M00056595:62	CH16COP
1824	416	RTA22200011F.m.06.1.P.Seq	F	M00056631:75	CH16COP
1825	2543	RTA22200225F.o.10.1.P.Seq	F	M00005545:18	CH02COH
1826	639352	RTA22200001F.n.09.1.P.Seq	F	M00042908:71	CH15CON
1827	453592	RTA22200009F.l.04.2.P.Seq	F	M00042842:31	CH16COP
1828	450633	RTA22200006F.n.19.2.P.Seq	F	M00056107:56	CH15CON
1829	448383	RTA22200009F.l.15.2.P.Seq	F	M00042844:312	CH16COP
1830	648719	RTA22200008F.a.08.1.P.Seq	F	M00056293:65	CH15CON
1831	730655	RTA22200012F.h.16.1.P.Seq	F	M00056722:71	CH16COP
1832	141185	RTA22200007F.j.21.2.P.Seq	F	M00056228:17	CH15CON
1833	640498	RTA22200003F.m.07.1.P.Seq	F	M00055703:28	CH15CON
1834	9029	RTA22200222F.l.08.1.P.Seq	F	M00004087:211	CH01COH
1835	559674	RTA22200014F.h.06.2.P.Seq	F	M00056974:64	CH16COP
1836	555734	RTA22200021F.n.09.2.P.Seq	F	M00054844:66	CH17COHLV
1837	1943	RTA22200017F.d.22.1.P.Seq	F	M00057333:69	CH16COP
1838	648320	RTA22200004F.d.05.1.P.Seq	F	M00055761:33	CH15CON
1839	558098	RTA22200024F.p.10.1.P.Seq	F	M00055260:15	CH17COHLV
1840	468672	RTA22200004F.h.23.1.P.Seq	F	M00055794:26	CH15CON
1841	456596	RTA22200022F.f.19.1.P.Seq	F	M00054926:61	CH17COHLV
1842	649722	RTA22200012F.n.07.1.P.Seq	F	M00056765:410	CH16COP
1843	550708	RTA22200022F.o.19.1.P.Seq	F	M00054996:211	CH17COHLV
1844	643931	RTA22200005F.n.14.1.P.Seq	F	M00055966:13	CH15CON
1845	726927	RTA22200011F.j.08.1.P.Seq	F	M00056603:41	CH16COP

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SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
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1847	397773	RTA22200003F.c.13.1.P.Seq	F	M00055592:15	CH15CON
1848	450004	RTA22200011F.f.04.1.P.Seq	F	M00056566:81	CH16COP
1849	649732	RTA22200007F.o.23.1.P.Seq	F	M00056282:89	CH15CON
1850	553955	RTA22200021F.f.08.3.P.Seq	F	M00054755:86	CH17COHLV
1851	646309	RTA22200012F.h.04.1.P.Seq	F	M00056718:21	CH16COP
1852	402727	RTA22200024F.m.16.1.P.Seq	F	M00055243:64	CH17COHLV
1853	468736	RTA22200024F.m.17.1.P.Seq	F	M00055243:71	CH17COHLV
1854	650422	RTA22200007F.a.16.1.P.Seq	F	M00056141:45	CH15CON
1855	730533	RTA22200013F.b.15.1.P.Seq	F	M00056808:212	CH16COP
1856	726307	RTA22200015F.a.17.1.P.Seq	F	M00057044:66	CH16COP
1857	450311	RTA22200005F.j.22.1.P.Seq	F	M00055922:32	CH15CON
1858	450940	RTA22200001F.j.15.1.P.Seq	F	M00042742:83	CH15CON
1859	726786	RTA22200015F.f.06.1.P.Seq	F	M00057077:42	CH16COP
1860	7634	RTA22200235F.b.19.1.P.Seq	F	M00022420:83	CH03MAH
1861	230995	RTA22200016F.e.14.1.P.Seq	F	M00057196:64	CH16COP
1862	374770	RTA22200003F.n.21.1.P.Seq	F	M00055720:16	CH15CON
1863	9275	RTA22200249F.g.11.1.P.Seq	F	M00027665:41	CH04MAL
1864	553860	RTA22200023F.k.02.1.P.Seq	F	M00055077:611	CH17COHLV
1865	452010	RTA22200001F.m.07.1.P.Seq	F	M00042900:37	CH15CON
1866	649560	RTA22200015F.j.16.1.P.Seq	F	M00057106:52	CH16COP
1867	452704	RTA22200008F.b.18.1.P.Seq	F	M00056307:812	CH15CON
1868	447594	RTA22200007F.j.10.1.P.Seq	F	M00056225:79	CH15CON
1869	555444	RTA22200015F.n.10.1.P.Seq	F	M00057130:811	CH16COP
1870	736556	RTA22200017F.c.20.1.P.Seq	F	M00057318:13	CH16COP
1871	5289	RTA22200235F.l.12.2.P.Seq	F	M00022533:56	CH03MAH
1872	732121	RTA22200015F.c.11.1.P.Seq	F	M00057059:66	CH16COP
1873	452567	RTA22200009F.f.12.1.P.Seq	F	M00042783:13	CH16COP
1874	551634	RTA22200002F.n.04.1.P.Seq	F	M00055544:54	CH15CON
1875	644099	RTA22200005F.g.07.1.P.Seq	F	M00055887:67	CH15CON
1876	726788	RTA22200012F.h.08.1.P.Seq	F	M00056719:19	CH16COP
1877	638802	RTA22200012F.a.02.1.P.Seq	F	M00056662:63	CH16COP
1878	646283	RTA22200002F.o.18.1.P.Seq	F	M00055553:82	CH15CON
1879	8403	RTA22200238F.n.03.1.P.Seq	F	M00022998:38	CH03MAH
1880	2224	RTA22200233F.g.23.1.P.Seq	F	M00008079:33	CH03MAH
1881	650053	RTA22200008F.g.02.1.P.Seq	F	M00056459:47	CH15CON
1882	380477	RTA22200008F.e.20.1.P.Seq	F	M00056437:87	CH15CON
1883	450867	RTA22200019F.a.09.1.P.Seq	F	M00043386:16	CH17COHLV
1884	456764	RTA22200003F.n.22.1.P.Seq	F	M00055720:11	CH15CON
1885	641373	RTA22200003F.b.11.1.P.Seq	F	M00055583:24	CH15CON
1886	555882	RTA22200004F.m.12.1.P.Seq	F	M00055818:510	CH15CON
1887	644046	RTA22200008F.b.04.1.P.Seq	F	M00056302:612	CH15CON
1888	447250	RTA22200009F.d.15.2.P.Seq	F	M00042760:37	CH16COP
1889	456596	RTA22200022F.o.14.1.P.Seq	F	M00054995:310	CH17COHLV
1890	2218	RTA22200225F.d.15.1.P.Seq	F	M00005447:41	CH02COH

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
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1892	640889	RTA22200003F.l.12.1.P.Seq	F	M00055691:57	CH15CON
1893	530774	RTA22200025F.n.12.2.P.Seq	F	M00055391:78	CH17COHLV
1894	649062	RTA22200002F.j.14.1.P.Seq	F	M00055519:87	CH15CON
1895	12808	RTA22200233F.m.15.1.P.Seq	F	M00021649:512	CH03MAH
1896	468672	RTA22200001F.g.11.1.P.Seq	F	M00042704:64	CH15CON
1897	650773	RTA22200008F.d.12.1.P.Seq	F	M00056324:42	CH15CON
1898	732237	RTA22200014F.j.12.2.P.Seq	F	M00056994:67	CH16COP
1899	650773	RTA22200001F.o.15.1.P.Seq	F	M00054798:61	CH15CON
1900	550216	RTA22200021F.b.09.2.P.Seq	F	M00054727:86	CH17COHLV
1901	639189	RTA22200002F.n.20.1.P.Seq	F	M00055547:55	CH15CON
1902	3447	RTA22200227F.l.17.1.P.Seq	F	M00006719:87	CH02COH
1903	2012	RTA22200248F.c.03.1.P.Seq	F	M00027524:211	CH04MAL
1904	642876	RTA22200005F.b.13.1.P.Seq	F	M00055856:64	CH15CON
1905	449690	RTA22200009F.j.10.2.P.Seq	F	M00042823:74	CH16COP
1906	451208	RTA22200004F.k.07.1.P.Seq	F	M00055804:63	CH15CON
1907	725811	RTA22200011F.k.18.1.P.Seq	F	M00056616:38	CH16COP
1908	1256	RTA22200232F.b.11.1.P.Seq	F	M00021869:41	CH03MAH
1909	446599	RTA22200004F.f.18.1.P.Seq	F	M00055780:78	CH15CON
1910	446537	RTA22200001F.c.05.1.P.Seq	F	M00042544:42	CH15CON
1911	726281	RTA22200010F.l.02.1.P.Seq	F	M00056484:72	CH16COP
1912	11286	RTA22200226F.n.17.1.P.Seq	F	M00005802:810	CH02COH
1913	556082	RTA22200022F.p.11.1.P.Seq	F	M00055005:811	CH17COHLV
1914	97507	RTA22200005F.a.21.1.P.Seq	F	M00055851:711	CH15CON
1915	535955	RTA22200022F.b.11.1.P.Seq	F	M00054876:73	CH17COHLV
1916	728251	RTA22200011F.i.08.1.P.Seq	F	M00056595:37	CH16COP
1917	733849	RTA22200015F.g.08.1.P.Seq	F	M00057085:13	CH16COP
1918	447574	RTA22200014F.k.20.2.P.Seq	F	M00057002:25	CH16COP
1919	7607	RTA22200229F.g.17.1.P.Seq	F	M00006976:45	CH02COH
1920	644032	RTA22200010F.i.21.1.P.Seq	F	M00056425:23	CH16COP
1921	454087	RTA22200012F.f.13.1.P.Seq	F	M00056709:15	CH16COP
1922	412364	RTA22200007F.p.02.1.P.Seq	F	M00056283:33	CH15CON
1923	535208	RTA22200002F.m.04.1.P.Seq	F	M00055534:81	CH15CON
1924	644609	RTA22200002F.m.21.1.P.Seq	F	M00055542:66	CH15CON
1925	645073	RTA22200004F.o.14.1.P.Seq	F	M00055830:710	CH15CON
1926	417467	RTA22200012F.g.08.1.P.Seq	F	M00056712:26	CH16COP
1927	554188	RTA22200004F.n.02.1.P.Seq	F	M00055821:712	CH15CON
1928	647185	RTA22200005F.n.02.1.P.Seq	F	M00055958:62	CH15CON
1929	736679	RTA22200012F.a.20.1.P.Seq	F	M00056666:38	CH16COP
1930	553547	RTA22200022F.j.02.1.P.Seq	F	M00054947:712	CH17COHLV
1931	641524	RTA22200016F.c.06.1.P.Seq	F	M00057170:83	CH16COP
1932	649717	RTA22200003F.f.02.1.P.Seq	F	M00055633:12	CH15CON
1933	451041	RTA22200018F.a.16.1.P.Seq	F	M00042355:31	CH17COHLV
1934	3483	RTA22200225F.e.24.1.P.Seq	F	M00005459:21	CH02COH
1935	500959	RTA22200008F.c.24.1.P.Seq	F	M00056323:810	CH15CON

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1938	736955	RTA22200013F.f.22.1.P.Seq	F	M00056840:89	CH16COP
1939	554742	RTA22200004F.l.14.1.P.Seq	F	M00055811:312	CH15CON
1940	642973	RTA22200015F.n.14.1.P.Seq	F	M00057132:68	CH16COP
1941	449437	RTA22200008F.b.13.1.P.Seq	F	M00056304:711	CH15CON
1942	467991	RTA22200002F.j.11.1.P.Seq	F	M00055517:43	CH15CON
1943	650204	RTA22200004F.n.13.1.P.Seq	F	M00055825:53	CH15CON
1944	640618	RTA22200004F.p.17.1.P.Seq	F	M00055840:46	CH15CON
1945	452366	RTA22200002F.j.05.1.P.Seq	F	M00055514:85	CH15CON
1946	640276	RTA22200012F.p.05.1.P.Seq	F	M00056780:69	CH16COP
1947	554101	RTA22200012F.f.24.1.P.Seq	F	M00056711:65	CH16COP
1948	185432	RTA22200249F.p.01.1.P.Seq	F	M00027742:21	CH04MAL
1949	455598	RTA22200022F.m.06.1.P.Seq	F	M00054970:73	CH17COHLV
1950	649354	RTA22200001F.o.05.1.P.Seq	F	M00054792:59	CH15CON
1951	4408	RTA22200242F.j.13.1.P.Seq	F	M00027034:49	CH04MAL
1952	452366	RTA22200006F.o.03.2.P.Seq	F	M00056110:49	CH15CON
1953	452366	RTA22200001F.e.02.1.P.Seq	F	M00042563:79	CH15CON
1954	727331	RTA22200016F.a.19.1.P.Seq	F	M00057161:59	CH16COP
1955	644853	RTA22200008F.a.05.1.P.Seq	F	M00056293:58	CH15CON
1956	554079	RTA22200014F.k.21.2.P.Seq	F	M00057002:26	CH16COP
1957	556245	RTA22200023F.l.05.1.P.Seq	F	M00055088:112	CH17COHLV
1958	557388	RTA22200012F.p.13.1.P.Seq	F	M00056783:711	CH16COP
1959	449468	RTA22200012F.l.11.1.P.Seq	F	M00056752:51	CH16COP
1960	556245	RTA22200023F.o.12.1.P.Seq	F	M00055125:56	CH17COHLV
1961	455327	RTA22200013F.b.03.1.P.Seq	F	M00056804:56	CH16COP
1962	546632	RTA22200015F.a.10.1.P.Seq	F	M00057041:211	CH16COP
1963	558762	RTA22200022F.a.03.1.P.Seq	F	M00054867:22	CH17COHLV
1964	550818	RTA22200020F.d.10.1.P.Seq	F	M00054590:72	CH17COHLV
1965	554079	RTA22200021F.p.09.2.P.Seq	F	M00054862:27	CH17COHLV
1966	452430	RTA22200016F.e.07.1.P.Seq	F	M00057192:52	CH16COP
1967	452430	RTA22200008F.e.11.1.P.Seq	F	M00056342:611	CH15CON
1968	556082	RTA22200019F.i.02.1.P.Seq	F	M00054507:311	CH17COHLV
1969	514418	RTA22200023F.e.23.1.P.Seq	F	M00055046:511	CH17COHLV
1970	426895	RTA22200021F.p.14.2.P.Seq	F	M00054863:73	CH17COHLV
1971	560803	RTA22200025F.c.05.1.P.Seq	F	M00055283:65	CH17COHLV
1972	447737	RTA22200018F.c.11.1.P.Seq	F	M00042453:51	CH17COHLV
1973	373432	RTA22200018F.l.18.1.P.Seq	F	M00043350:89	CH17COHLV
1974	779	RTA22200250F.f.02.1.P.Seq	F	M00027820:32	CH04MAL
1975	455327	RTA22200015F.m.05.1.P.Seq	F	M00057124:410	CH16COP
1976	554742	RTA22200004F.k.16.1.P.Seq	F	M00055806:812	CH15CON
1977	455327	RTA22200022F.g.14.1.P.Seq	F	M00054933:47	CH17COHLV
1978	11043	RTA22200228F.j.10.2.P.Seq	F	M00006861:18	CH02COH
1979	727447	RTA22200012F.c.14.1.P.Seq	F	M00056684:15	CH16COP
1980	552905	RTA22200011F.i.16.1.P.Seq	F	M00056597:67	CH16COP

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
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1983	455327	RTA22200021F.c.18.2.P.Seq	F	M00054739:73	CH17COHLV
1984	422375	RTA22200020F.g.01.1.P.Seq	F	M00054613:49	CH17COHLV
1985	422375	RTA22200020F.f.24.1.P.Seq	F	M00054613:49	CH17COHLV
1986	530774	RTA22200025F.p.22.2.P.Seq	F	M00055405:49	CH17COHLV
1987	554101	RTA22200012F.g.01.1.P.Seq	F	M00056711:65	CH16COP
1988	5268	RTA22200226F.g.10.1.P.Seq	F	M00005650:44	CH02COH
1989	642461	RTA22200012F.g.18.1.P.Seq	F	M00056715:71	CH16COP
1990	770	RTA22200003F.a.18.1.P.Seq	F	M00055575:48	CH15CON
1991	3837	RTA22200231F.b.24.1.P.Seq	F	M00007936:29	CH03MAH
1992	561382	RTA22200022F.d.20.1.P.Seq	F	M00054899:71	CH17COHLV
1993	4408	RTA22200248F.e.13.1.P.Seq	F	M00027543:29	CH04MAL
1994	5686	RTA22200234F.j.21.1.P.Seq	F	M00022279:84	CH03MAH
1995	374609	RTA22200013F.e.23.1.P.Seq	F	M00056833:31	CH16COP
1996	734793	RTA22200012F.h.06.1.P.Seq	F	M00056719:46	CH16COP
1997	452430	RTA22200014F.f.18.2.P.Seq	F	M00056964:12	CH16COP
1998	450940	RTA22200020F.n.11.1.P.Seq	F	M00054684:812	CH17COHLV
1999	460445	RTA22200024F.c.23.1.P.Seq	F	M00055162:66	CH17COHLV
2000	549041	RTA22200020F.i.01.1.P.Seq	F	M00054636:23	CH17COHLV
2001	555276	RTA22200018F.g.13.1.P.Seq	F	M00043313:77	CH17COHLV
2002	426895	RTA22200015F.l.18.1.P.Seq	F	M00057120:512	CH16COP
2003	1833	RTA22200224F.f.16.1.P.Seq	F	M00005293:46	CH02COH
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2005	650517	RTA22200007F.l.18.2.P.Seq	F	M00056248:19	CH15CON
2006	554785	RTA22200026F.f.14.1.P.Seq	F	M00055479:312	CH17COHLV
2007	607430	RTA22200002F.i.06.1.P.Seq	F	M00055508:53	CH15CON
2008	446673	RTA22200012F.a.18.1.P.Seq	F	M00056665:55	CH16COP
2009	734685	RTA22200014F.i.17.2.P.Seq	F	M00056986:71	CH16COP
2010	11630	RTA22200248F.h.02.1.P.Seq	F	M00027562:32	CH04MAL
2011	2930	RTA22200228F.c.13.1.P.Seq	F	M00006795:47	CH02COH
2012	44424	RTA22200006F.f.07.2.P.Seq	F	M00056038:64	CH15CON
2013	452052	RTA22200001F.e.19.1.P.Seq	F	M00042574:88	CH15CON
2014	449356	RTA22200009F.j.14.2.P.Seq	F	M00042826:35	CH16COP
2015	726225	RTA22200010F.d.04.1.P.Seq	F	M00056372:310	CH16COP
2016	453708	RTA22200022F.j.14.1.P.Seq	F	M00054950:76	CH17COHLV
2017	447858	RTA22200003F.n.20.1.P.Seq	F	M00055720:79	CH15CON
2018	451613	RTA22200018F.e.18.1.P.Seq	F	M00043301:89	CH17COHLV
2019	650337	RTA22200008F.c.18.1.P.Seq	F	M00056319:71	CH15CON
2020	62016	RTA22200019F.k.10.1.P.Seq	F	M00054522:811	CH17COHLV
2021	447250	RTA22200014F.f.02.2.P.Seq	F	M00056960:35	CH16COP
2022	3837	RTA22200231F.c.01.1.P.Seq	F	M00007936:29	CH03MAH
2023	640614	RTA22200017F.e.22.1.P.Seq	F	M00057340:312	CH16COP
2024	729531	RTA22200013F.g.24.1.P.Seq	F	M00056850:511	CH16COP
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Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
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2028	2675	RTA22200233F.a.20.1.P.Seq	F	M00008015:68	CH03MAH
2029	643481	RTA22200003F.i.13.1.P.Seq	F	M00055664:18	CH15CON
2030	1345	RTA22200012F.l.22.1.P.Seq	F	M00056754:84	CH16COP
2031	26	RTA22200231F.a.03.1.P.Seq	F	M00007926:15	CH03MAH
2032	945	RTA22200230F.h.02.1.P.Seq	F	M00007156:56	CH02COH
2033	449169	RTA22200009F.b.09.2.P.Seq	F	M00042461:110	CH16COP
2034	394193	RTA22200007F.h.10.1.P.Seq	F	M00056209:612	CH15CON
2035	452212	RTA22200006F.h.13.2.P.Seq	F	M00056055:21	CH15CON
2036	394193	RTA22200007F.i.15.2.P.Seq	F	M00056220:42	CH15CON
2037	1310	RTA22200235F.o.10.2.P.Seq	F	M00022561:16	CH03MAH
2038	734094	RTA22200016F.k.07.1.P.Seq	F	M00057241:24	CH16COP
2039	646579	RTA22200002F.h.08.1.P.Seq	F	M00055498:89	CH15CON
2040	4471	RTA22200233F.j.22.1.P.Seq	F	M00008098:81	CH03MAH
2041	729173	RTA22200016F.e.13.1.P.Seq	F	M00057196:53	CH16COP
2042	450323	RTA22200009F.i.11.2.P.Seq	F	M00042814:211	CH16COP
2043	4652	RTA22200241F.n.17.1.P.Seq	F	M00026950:612	CH04MAL
2044	553316	RTA22200021F.a.10.2.P.Seq	F	M00054722:38	CH17COHLV
2045	642604	RTA22200016F.j.10.1.P.Seq	F	M00057233:67	CH16COP
2046	553316	RTA22200002F.i.02.1.P.Seq	F	M00055504:48	CH15CON
2047	4097	RTA22200249F.f.14.1.P.Seq	F	M00027652:73	CH04MAL
2048	6818	RTA22200006F.f.12.2.P.Seq	F	M00056042:11	CH15CON
2049	395341	RTA22200024F.c.22.1.P.Seq	F	M00055161:111	CH17COHLV
2050	649143	RTA22200007F.o.20.1.P.Seq	F	M00056282:31	CH15CON
2051	649143	RTA22200007F.o.18.1.P.Seq	F	M00056282:611	CH15CON
2052	648310	RTA22200007F.e.16.1.P.Seq	F	M00056184:61	CH15CON
2053	447574	RTA22200014F.k.20.1.P.Seq	F	M00057002:25	CH16COP
2054	648931	RTA22200004F.b.12.1.P.Seq	F	M00055744:68	CH15CON
2055	6878	RTA22200231F.a.01.1.P.Seq	F	M00007926:17	CH03MAH
2056	452238	RTA22200009F.d.09.2.P.Seq	F	M00042758:812	CH16COP
2057	1870	RTA22200238F.g.09.1.P.Seq	F	M00022911:71	CH03MAH
2058	559259	RTA22200002F.n.12.1.P.Seq	F	M00055545:812	CH15CON
2059	453457	RTA22200004F.a.06.1.P.Seq	F	M00055735:37	CH15CON
2060	8868	RTA22200233F.l.13.1.P.Seq	F	M00021626:64	CH03MAH
2061	453059	RTA22200001F.b.21.1.P.Seq	F	M00042540:63	CH15CON
2062	236368	RTA22200008F.d.09.1.P.Seq	F	M00056323:17	CH15CON
2063	453059	RTA22200001F.b.18.1.P.Seq	F	M00042539:55	CH15CON
2064	549979	RTA22200007F.c.06.1.P.Seq	F	M00056153:41	CH15CON
2065	515631	RTA22200014F.j.22.2.P.Seq	F	M00056996:112	CH16COP
2066	2235	RTA22200234F.f.22.1.P.Seq	F	M00022236:12	CH03MAH
2067	448193	RTA22200016F.n.15.1.P.Seq	F	M00057271:51	CH16COP
2068	530774	RTA22200010F.c.12.1.P.Seq	F	M00056368:64	CH16COP
2069	650204	RTA22200002F.d.14.1.P.Seq	F	M00055450:28	CH15CON
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Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
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2074	454531	RTA22200022F.a.11.1.P.Seq	F	M00054869:41	CH17COHLV
2075	643485	RTA22200006F.g.19.2.P.Seq	F	M00056050:13	CH15CON
2076	733669	RTA22200013F.m.22.1.P.Seq	F	M00056895:17	CH16COP
2077	452344	RTA22200016F.b.19.1.P.Seq	F	M00057167:27	CH16COP
2078	63602	RTA22200002F.b.11.1.P.Seq	F	M00055431:59	CH15CON
2079	454155	RTA22200004F.j.13.1.P.Seq	F	M00055802:48	CH15CON
2080	549903	RTA22200013F.b.22.1.P.Seq	F	M00056811:34	CH16COP
2081	515631	RTA22200014F.j.22.1.P.Seq	F	M00056996:112	CH16COP
2082	6878	RTA22200248F.j.20.1.P.Seq	F	M00027580:510	CH04MAL
2083	2977	RTA22200231F.l.18.1.P.Seq	F	M00007983:86	CH03MAH
2084	553823	RTA22200006F.i.02.2.P.Seq	F	M00056060:210	CH15CON
2085	3070	RTA22200026F.a.07.1.P.Seq	F	M00055405:77	CH17COHLV
2086	728884	RTA22200012F.k.06.1.P.Seq	F	M00056740:25	CH16COP
2087	8166	RTA22200009F.c.03.2.P.Seq	F	M00042469:84	CH16COP
2088	644190	RTA22200010F.b.18.1.P.Seq	F	M00056362:75	CH16COP
2089	733669	RTA22200015F.l.05.1.P.Seq	F	M00057117:711	CH16COP
2090	728273	RTA22200011F.i.07.1.P.Seq	F	M00056595:12	CH16COP
2091	406499	RTA22200004F.a.13.1.P.Seq	F	M00055736:77	CH15CON
2092	557720	RTA22200022F.k.07.1.P.Seq	F	M00054954:61	CH17COHLV
2093	732050	RTA22200015F.d.10.1.P.Seq	F	M00057065:44	CH16COP
2094	450867	RTA22200020F.j.18.1.P.Seq	F	M00054648:810	CH17COHLV
2095	650297	RTA22200016F.a.01.1.P.Seq	F	M00057151:24	CH16COP
2096	448064	RTA22200009F.f.08.1.P.Seq	F	M00042781:16	CH16COP
2097	452530	RTA22200018F.p.03.1.P.Seq	F	M00043374:26	CH17COHLV
2098	7592	RTA22200225F.m.10.1.P.Seq	F	M00005515:84	CH02COH
2099	733669	RTA22200016F.b.13.1.P.Seq	F	M00057165:512	CH16COP
2100	11028	RTA22200228F.d.13.1.P.Seq	F	M00006806:39	CH02COH
2101	1013	RTA22200001F.h.22.1.P.Seq	F	M00042720:710	CH15CON
2102	549265	RTA22200002F.h.03.1.P.Seq	F	M00055496:39	CH15CON
2103	376600	RTA22200013F.p.08.1.P.Seq	F	M00056911:62	CH16COP
2104	643804	RTA22200004F.p.14.1.P.Seq	F	M00055839:110	CH15CON
2105	454927	RTA22200026F.d.08.1.P.Seq	F	M00055420:610	CH17COHLV
2106	446528	RTA22200006F.i.06.2.P.Seq	F	M00056061:66	CH15CON
2107	2218	RTA22200226F.n.14.1.P.Seq	F	M00005800:411	CH02COH
2108	452704	RTA22200004F.a.01.1.P.Seq	F	M00055733:711	CH15CON
2109	84895	RTA22200014F.m.13.2.P.Seq	F	M00057013:41	CH16COP
2110	157629	RTA22200242F.c.11.1.P.Seq	F	M00026984:410	CH04MAL
2111	2930	RTA22200229F.h.22.1.P.Seq	F	M00006990:52	CH02COH
2112	7037	RTA22200230F.k.08.1.P.Seq	F	M00007194:24	CH02COH
2113	559806	RTA22200002F.i.04.1.P.Seq	F	M00055505:110	CH15CON
2114	452076	RTA22200004F.g.03.1.P.Seq	F	M00055783:311	CH15CON
2115	454869	RTA22200004F.e.14.1.P.Seq	F	M00055771:44	CH15CON

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2119	729173	RTA22200016F.n.22.1.P.Seq	F	M00057272:11	CH16COP
2120	650448	RTA22200004F.m.09.1.P.Seq	F	M00055818:612	CH15CON
2121	172013	RTA22200002F.j.16.1.P.Seq	F	M00055520:16	CH15CON
2122	651088	RTA22200014F.c.15.1.P.Seq	F	M00056945:211	CH16COP
2123	651088	RTA22200014F.c.15.2.P.Seq	F	M00056945:211	CH16COP
2124	726810	RTA22200015F.o.06.1.P.Seq	F	M00057136:61	CH16COP
2125	406499	RTA22200004F.n.23.1.P.Seq	F	M00055827:12	CH15CON
2126	556325	RTA22200023F.l.03.1.P.Seq	F	M00055087:110	CH17COHLV
2127	644836	RTA22200004F.i.13.1.P.Seq	F	M00055797:48	CH15CON
2128	649062	RTA22200007F.d.04.1.P.Seq	F	M00056162:59	CH15CON
2129	454776	RTA22200011F.d.07.1.P.Seq	F	M00056551:62	CH16COP
2130	377579	RTA22200025F.f.17.1.P.Seq	F	M00055332:711	CH17COHLV
2131	728131	RTA22200014F.o.08.1.P.Seq	F	M00057024:75	CH16COP
2132	475203	RTA22200016F.a.05.1.P.Seq	F	M00057154:24	CH16COP
2133	727314	RTA22200011F.p.15.1.P.Seq	F	M00056659:78	CH16COP
2134	552025	RTA22200019F.k.13.1.P.Seq	F	M00054523:110	CH17COHLV
2135	561382	RTA22200004F.d.11.1.P.Seq	F	M00055765:25	CH15CON
2136	732579	RTA22200017F.a.22.1.P.Seq	F	M00057300:62	CH16COP
2137	167	RTA22200012F.o.22.1.P.Seq	F	M00056779:512	CH16COP
2138	185585	RTA22200241F.l.21.1.P.Seq	F	M00026937:28	CH04MAL
2139	728131	RTA22200014F.o.08.2.P.Seq	F	M00057024:75	CH16COP
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2142	726594	RTA22200015F.d.13.1.P.Seq	F	M00057066:14	CH16COP
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2145	646583	RTA22200009F.m.15.1.P.Seq	F	M00042850:310	CH16COP
2146	475203	RTA22200014F.m.07.1.P.Seq	F	M00057011:43	CH16COP
2147	550001	RTA22200002F.e.03.1.P.Seq	F	M00055454:17	CH15CON
2148	640703	RTA22200002F.i.19.1.P.Seq	F	M00055512:47	CH15CON
2149	646583	RTA22200007F.k.10.2.P.Seq	F	M00056236:71	CH15CON
2150	449468	RTA22200014F.l.23.1.P.Seq	F	M00057008:59	CH16COP
2151	449468	RTA22200016F.h.22.1.P.Seq	F	M00057223:36	CH16COP
2152	551628	RTA22200001F.l.16.1.P.Seq	F	M00042891:34	CH15CON
2153	449468	RTA22200014F.l.23.2.P.Seq	F	M00057008:59	CH16COP
2154	417259	RTA22200021F.i.19.3.P.Seq	F	M00054804:812	CH17COHLV
2155	448029	RTA22200009F.n.10.1.P.Seq	F	M00042856:67	CH16COP
2156	524363	RTA22200024F.h.07.1.P.Seq	F	M00055201:13	CH17COHLV
2157	446531	RTA22200023F.n.24.1.P.Seq	F	M00055116:22	CH17COHLV
2158	561359	RTA22200008F.a.11.1.P.Seq	F	M00056295:67	CH15CON
2159	711297	RTA22200007F.f.10.1.P.Seq	F	M00056190:72	CH15CON
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2163	560515	RTA22200023F.g.10.1.P.Seq	F	M00055054:32	CH17COHLV
2164	3441	RTA22200235F.l.18.2.P.Seq	F	M00022537:311	CH03MAH
2165	729273	RTA22200016F.i.03.1.P.Seq	F	M00057224:310	CH16COP
2166	557039	RTA22200004F.g.15.1.P.Seq	F	M00055786:45	CH15CON
2167	711297	RTA22200015F.k.22.1.P.Seq	F	M00057114:210	CH16COP
2168	711297	RTA22200014F.g.08.2.P.Seq	F	M00056967:42	CH16COP
2169	2860	RTA22200012F.i.07.1.P.Seq	F	M00056726:75	CH16COP
2170	558534	RTA22200020F.l.05.1.P.Seq	F	M00054665:511	CH17COHLV
2171	711297	RTA22200014F.g.08.1.P.Seq	F	M00056967:42	CH16COP
2172	378457	RTA22200025F.g.08.1.P.Seq	F	M00055338:87	CH17COHLV
2173	646583	RTA22200007F.n.04.1.P.Seq	F	M00056263:31	CH15CON
2174	646583	RTA22200006F.p.06.2.P.Seq	F	M00056128:210	CH15CON
2175	1996	RTA22200012F.m.23.1.P.Seq	F	M00056762:55	CH16COP
2176	7962	RTA22200235F.d.18.1.P.Seq	F	M00022452:27	CH03MAH
2177	645139	RTA22200013F.n.18.1.P.Seq	F	M00056902:812	CH16COP
2178	449468	RTA22200018F.g.12.1.P.Seq	F	M00043313:13	CH17COHLV
2179	9898	RTA22200238F.f.06.1.P.Seq	F	M00022902:810	CH03MAH
2180	406499	RTA22200004F.i.15.1.P.Seq	F	M00055797:57	CH15CON
2181	1257	RTA22200230F.h.06.1.P.Seq	F	M00007156:68	CH02COH
2182	549903	RTA22200004F.g.12.1.P.Seq	F	M00055785:58	CH15CON
2183	557906	RTA22200004F.j.22.1.P.Seq	F	M00055803:48	CH15CON
2184	3538	RTA22200222F.c.09.1.P.Seq	F	M00001491:38	CH01COH
2185	3114	RTA22200231F.n.12.1.P.Seq	F	M00007994:311	CH03MAH
2186	426895	RTA22200018F.l.24.1.P.Seq	F	M00043352:25	CH17COHLV
2187	923	RTA22200015F.c.15.1.P.Seq	F	M00057060:112	CH16COP
2188	645194	RTA22200007F.h.17.1.P.Seq	F	M00056212:71	CH15CON
2189	550161	RTA22200014F.a.06.1.P.Seq	F	M00056921:37	CH16COP
2190	650119	RTA22200005F.d.21.1.P.Seq	F	M00055874:43	CH15CON
2191	642142	RTA22200016F.g.21.1.P.Seq	F	M00057217:27	CH16COP
2192	419255	RTA22200004F.l.20.1.P.Seq	F	M00055814:411	CH15CON
2193	552905	RTA22200019F.j.20.1.P.Seq	F	M00054518:43	CH17COHLV
2194	511997	RTA22200005F.b.22.1.P.Seq	F	M00055860:18	CH15CON
2195	551434	RTA22200003F.m.02.1.P.Seq	F	M00055701:410	CH15CON
2196	727447	RTA22200012F.m.18.1.P.Seq	F	M00056759:73	CH16COP
2197	378786	RTA22200025F.o.11.2.P.Seq	F	M00055396:77	CH17COHLV
2198	649152	RTA22200006F.p.11.2.P.Seq	F	M00056131:312	CH15CON
2199	18853	RTA22200023F.p.10.1.P.Seq	F	M00055134:53	CH17COHLV
2200	643481	RTA22200005F.f.05.1.P.Seq	F	M00055884:510	CH15CON
2201	644417	RTA22200004F.p.08.1.P.Seq	F	M00055838:712	CH15CON
2202	726788	RTA22200011F.i.17.1.P.Seq	F	M00056597:32	CH16COP
2203	206	RTA22200248F.m.13.1.P.Seq	F	M00027594:33	CH04MAL
2204	395930	RTA22200011F.c.20.1.P.Seq	F	M00056548:311	CH16COP
2205	185589	RTA22200244F.a.15.1.P.Seq	F	M00027168:810	CH04MAL

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2208	203605	RTA22200013F.n.02.1.P.Seq	F	M00056896:65	CH16COP
2209	551527	RTA22200019F.g.15.1.P.Seq	F	M00054496:29	CH17COHLV
2210	4509	RTA22200225F.m.07.1.P.Seq	F	M00005514:16	CH02COH
2211	447737	RTA22200001F.g.12.1.P.Seq	F	M00042704:69	CH15CON
2212	447388	RTA22200004F.k.08.1.P.Seq	F	M00055804:61	CH15CON
2213	451932	RTA22200002F.c.24.1.P.Seq	F	M00055447:84	CH15CON
2214	559043	RTA22200025F.c.20.1.P.Seq	F	M00055294:44	CH17COHLV
2215	380634	RTA22200021F.n.06.2.P.Seq	F	M00054842:311	CH17COHLV
2216	495715	RTA22200018F.p.18.1.P.Seq	F	M00043379:37	CH17COHLV
2217	451932	RTA22200002F.d.01.1.P.Seq	F	M00055447:84	CH15CON
2218	447939	RTA22200002F.d.12.1.P.Seq	F	M00055450:79	CH15CON
2219	1181	RTA22200250F.c.03.1.P.Seq	F	M00027781:54	CH04MAL
2220	376600	RTA22200017F.a.06.1.P.Seq	F	M00057288:58	CH16COP
2221	234761	RTA22200001F.j.10.1.P.Seq	F	M00042739:41	CH15CON
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2223	639048	RTA22200004F.c.05.1.P.Seq	F	M00055749:811	CH15CON
2224	11452	RTA22200226F.d.16.1.P.Seq	F	M00005628:310	CH02COH
2225	452076	RTA22200001F.c.17.1.P.Seq	F	M00042551:49	CH15CON
2226	644523	RTA22200005F.c.07.1.P.Seq	F	M00055864:82	CH15CON
2227	554678	RTA22200021F.h.11.3.P.Seq	F	M00054776:61	CH17COHLV
2228	3550	RTA22200236F.k.16.1.P.Seq	F	M00022656:511	CH03MAH
2229	450311	RTA22200007F.d.12.1.P.Seq	F	M00056167:28	CH15CON
2230	647280	RTA22200005F.o.13.1.P.Seq	F	M00055976:61	CH15CON
2231	548858	RTA22200026F.f.18.1.P.Seq	F	M00055480:810	CH17COHLV
2232	4204	RTA22200225F.p.22.1.P.Seq	F	M00005568:29	CH02COH
2233	540690	RTA22200011F.f.19.1.P.Seq	F	M00056574:17	CH16COP
2234	404774	RTA22200009F.k.06.2.P.Seq	F	M00042833:71	CH16COP
2235	557823	RTA22200023F.h.01.1.P.Seq	F	M00055057:63	CH17COHLV
2236	1458	RTA22200242F.g.04.1.P.Seq	F	M00027014:74	CH04MAL
2237	485431	RTA22200020F.e.01.1.P.Seq	F	M00054595:89	CH17COHLV
2238	2245	RTA22200229F.l.11.1.P.Seq	F	M00007032:69	CH02COH
2239	3242	RTA22200226F.p.09.1.P.Seq	F	M00005826:710	CH02COH
2240	648747	RTA22200007F.m.12.1.P.Seq	F	M00056254:82	CH15CON
2241	3805	RTA22200222F.c.01.1.P.Seq	F	M00001470:71	CH01COH
2242	475203	RTA22200012F.c.17.1.P.Seq	F	M00056688:65	CH16COP
2243	12018	RTA22200240F.h.11.1.P.Seq	F	M00023399:38	CH04MAL
2244	475203	RTA22200009F.i.18.2.P.Seq	F	M00042818:512	CH16COP
2245	3805	RTA22200222F.b.24.1.P.Seq	F	M00001470:71	CH01COH
2246	496132	RTA22200018F.e.23.1.P.Seq	F	M00043304:41	CH17COHLV
2247	650600	RTA22200005F.m.01.1.P.Seq	F	M00055941:212	CH15CON
2248	650749	RTA22200004F.g.10.1.P.Seq	F	M00055785:63	CH15CON
2249	223148	RTA22200023F.n.05.1.P.Seq	F	M00055106:47	CH17COHLV
2250	449	RTA22200018F.m.12.1.P.Seq	F	M00043355:811	CH17COHLV

Table 1

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2253	218	RTA22200021F.m.03.2.P.Seq	F	M00054832:59	CH17COHLV
2254	4161	RTA22200222F.d.07.1.P.Seq	F	M00001561:71	CH01COH
2255	373202	RTA22200025F.f.01.1.P.Seq	F	M00055322:51	CH17COHLV
2256	724339	RTA22200010F.l.14.1.P.Seq	F	M00056490:52	CH16COP
2257	113291	RTA22200007F.p.17.1.P.Seq	F	M00056290:65	CH15CON
2258	736753	RTA22200016F.f.22.1.P.Seq	F	M00057208:48	CH16COP
2259	650600	RTA22200003F.m.18.1.P.Seq	F	M00055706:11	CH15CON
2260	451569	RTA22200013F.l.03.1.P.Seq	F	M00056879:12	CH16COP
2261	1297	RTA22200233F.n.06.1.P.Seq	F	M00021655:82	CH03MAH
2262	3680	RTA22200241F.h.12.1.P.Seq	F	M00026906:310	CH04MAL
2263	63602	RTA22200005F.g.11.1.P.Seq	F	M00055888:25	CH15CON
2264	2757	RTA22200238F.l.07.1.P.Seq	F	M00022973:77	CH03MAH
2265	373128	RTA22200020F.a.11.1.P.Seq	F	M00054569:87	CH17COHLV
2266	641479	RTA22200014F.l.16.2.P.Seq	F	M00057007:212	CH16COP
2267	450380	RTA22200015F.b.12.1.P.Seq	F	M00057049:85	CH16COP
2268	133512	RTA22200024F.i.12.1.P.Seq	F	M00055209:18	CH17COHLV
2269	447211	RTA22200006F.b.19.2.P.Seq	F	M00056007:66	CH15CON
2270	645222	RTA22200013F.a.24.1.P.Seq	F	M00056802:81	CH16COP
2271	645222	RTA22200013F.b.01.1.P.Seq	F	M00056802:81	CH16COP
2272	17372	RTA22200002F.i.22.1.P.Seq	F	M00055513:46	CH15CON
2273	451619	RTA22200025F.m.23.2.P.Seq	F	M00055388:88	CH17COHLV
2274	2510	RTA22200238F.m.21.1.P.Seq	F	M00022995:52	CH03MAH
2275	643974	RTA22200007F.n.15.1.P.Seq	F	M00056268:24	CH15CON
2276	500630	RTA22200013F.j.19.1.P.Seq	F	M00056872:16	CH16COP
2277	3101	RTA22200225F.n.05.1.P.Seq	F	M00005530:17	CH02COH
2278	446938	RTA22200004F.c.11.1.P.Seq	F	M00055751:41	CH15CON
2279	554469	RTA22200013F.f.23.1.P.Seq	F	M00056841:79	CH16COP
2280	554469	RTA22200003F.n.24.1.P.Seq	F	M00055721:66	CH15CON
2281	2894	RTA22200016F.b.05.1.P.Seq	F	M00057163:21	CH16COP
2282	650600	RTA22200008F.e.04.1.P.Seq	F	M00056338:210	CH15CON
2283	3101	RTA22200226F.j.12.1.P.Seq	F	M00005710:41	CH02COH
2284	554469	RTA22200003F.o.01.1.P.Seq	F	M00055721:66	CH15CON
2285	9910	RTA22200236F.n.06.1.P.Seq	F	M00022667:35	CH03MAH
2286	400608	RTA22200008F.g.03.1.P.Seq	F	M00056460:711	CH15CON
2287	555051	RTA22200021F.o.07.2.P.Seq	F	M00054854:58	CH17COHLV
2288	185400	RTA22200002F.j.21.1.P.Seq	F	M00055522:57	CH15CON
2289	3059	RTA22200233F.g.05.1.P.Seq	F	M00008075:112	CH03MAH
2290	647185	RTA22200004F.b.20.1.P.Seq	F	M00055747:49	CH15CON
2291	1669	RTA22200237F.p.19.1.P.Seq	F	M00022853:311	CH03MAH
2292	7158	RTA22200232F.l.21.1.P.Seq	F	M00022129:512	CH03MAH
2293	496132	RTA22200005F.d.06.1.P.Seq	F	M00055871:76	CH15CON
2294	378623	RTA22200024F.k.20.1.P.Seq	F	M00055227:52	CH17COHLV
2295	1257	RTA22200227F.i.05.1.P.Seq	F	M00006679:34	CH02COH

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
2296	648499	RTA22200012F.d.21.1.P.Seq	F	M00056698:512	CH16COP
2297	185627	RTA22200242F.k.21.1.P.Seq	F	M00027042:711	CH04MAL
2298	640005	RTA22200008F.c.15.1.P.Seq	F	M00056312:33	CH15CON
2299	553462	RTA22200021F.e.14.3.P.Seq	F	M00054750:412	CH17COHLV
2300	649852	RTA22200002F.g.01.1.P.Seq	F	M00055470:71	CH15CON
2301	422375	RTA22200018F.e.04.1.P.Seq	F	M00043296:210	CH17COHLV
2302	10910	RTA22200227F.n.22.1.P.Seq	F	M00006745:42	CH02COH
2303	2737	RTA22200023F.c.21.1.P.Seq	F	M00055034:71	CH17COHLV
2304	3438	RTA22200225F.o.18.1.P.Seq	F	M00005548:12	CH02COH
2305	3438	RTA22200228F.m.18.2.P.Seq	F	M00006885:711	CH02COH
2306	3763	RTA22200225F.o.12.1.P.Seq	F	M00005546:72	CH02COH
2307	648966	RTA22200007F.a.18.1.P.Seq	F	M00056141:29	CH15CON
2308	724339	RTA22200013F.m.10.1.P.Seq	F	M00056892:11	CH16COP
2309	451569	RTA22200018F.l.17.1.P.Seq	F	M00043350:86	CH17COHLV
2310	554109	RTA22200007F.d.17.1.P.Seq	F	M00056171:812	CH15CON
2311	380339	RTA22200006F.h.10.2.P.Seq	F	M00056055:17	CH15CON
2312	729903	RTA22200014F.g.06.1.P.Seq	F	M00056966:111	CH16COP
2313	45	RTA22200025F.l.10.1.P.Seq	F	M00055379:38	CH17COHLV
2314	454653	RTA22200019F.d.21.1.P.Seq	F	M00043503:55	CH17COHLV
2315	11536	RTA22200237F.n.02.1.P.Seq	F	M00022828:36	CH03MAH
2316	373134	RTA22200001F.h.02.1.P.Seq	F	M00042711:34	CH15CON
2317	185691	RTA22200241F.g.04.1.P.Seq	F	M00026900:32	CH04MAL
2318	234761	RTA22200011F.o.06.1.P.Seq	F	M00056646:75	CH16COP
2319	724339	RTA22200012F.f.19.1.P.Seq	F	M00056710:31	CH16COP
2320	732740	RTA22200016F.j.04.1.P.Seq	F	M00057231:19	CH16COP
2321	35895	RTA22200017F.d.10.1.P.Seq	F	M00057325:310	CH16COP
2322	133512	RTA22200018F.d.16.1.P.Seq	F	M00042517:67	CH17COHLV
2323	2974	RTA22200227F.b.03.1.P.Seq	F	M00006590:310	CH02COH
2324	500	RTA22200231F.l.13.1.P.Seq	F	M00007983:43	CH03MAH
2325	376919	RTA22200020F.m.09.1.P.Seq	F	M00054678:57	CH17COHLV
2326	8403	RTA22200233F.g.08.1.P.Seq	F	M00008076:62	CH03MAH
2327	3643	RTA22200227F.e.11.1.P.Seq	F	M00006638:72	CH02COH
2328	447211	RTA22200001F.j.13.1.P.Seq	F	M00042741:410	CH15CON
2329	447211	RTA22200001F.b.15.1.P.Seq	F	M00042538:18	CH15CON
2330	14929	RTA22200025F.i.20.1.P.Seq	F	M00055363:712	CH17COHLV
2331	648934	RTA22200006F.k.14.2.P.Seq	F	M00056081:29	CH15CON
2332	731785	RTA22200014F.j.11.2.P.Seq	F	M00056993:43	CH16COP
2333	639908	RTA22200005F.g.08.1.P.Seq	F	M00055887:54	CH15CON
2334	344577	RTA22200014F.m.20.1.P.Seq	F	M00057015:312	CH16COP
2335	2906	RTA22200015F.m.13.1.P.Seq	F	M00057127:611	CH16COP
2336	446938	RTA22200002F.c.18.1.P.Seq	F	M00055445:76	CH15CON
2337	2493	RTA22200234F.h.08.1.P.Seq	F	M00022251:19	CH03MAH
2338	38	RTA22200006F.o.08.2.P.Seq	F	M00056112:82	CH15CON
2339	13818	RTA22200238F.e.13.1.P.Seq	F	M00022898:64	CH03MAH
2340	8371	RTA22200229F.o.12.1.P.Seq	F	M00007065:611	CH02COH

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
2341	402494	RTA22200012F.o.16.1.P.Seq	F	M00056776:16	CH16COP
2342	731785	RTA22200014F.j.11.1.P.Seq	F	M00056993:43	CH16COP
2343	4621	RTA22200235F.f.15.1.P.Seq	F	M00022468:510	CH03MAH
2344	9750	RTA22200229F.g.23.1.P.Seq	F	M00006979:210	CH02COH
2345	133512	RTA22200024F.p.23.1.P.Seq	F	M00055263:79	CH17COHLV
2346	162626	RTA22200250F.f.03.1.P.Seq	F	M00027823:77	CH04MAL
2347	730059	RTA22200011F.a.20.1.P.Seq	F	M00056530:41	CH16COP
2348	2069	RTA22200224F.k.12.1.P.Seq	F	M00005373:86	CH02COH
2349	5868	RTA22200242F.i.17.1.P.Seq	F	M00027030:38	CH04MAL
2350	2683	RTA22200226F.o.08.1.P.Seq	F	M00005813:510	CH02COH
2351	380409	RTA22200012F.h.07.1.P.Seq	F	M00056719:612	CH16COP
2352	639991	RTA22200002F.k.20.1.P.Seq	F	M00055527:54	CH15CON
2353	535	RTA22200233F.a.19.1.P.Seq	F	M00008015:210	CH03MAH
2354	14929	RTA22200025F.f.21.1.P.Seq	F	M00055335:83	CH17COHLV
2355	134702	RTA22200249F.n.23.1.P.Seq	F	M00027733:45	CH04MAL
2356	642477	RTA22200004F.j.16.1.P.Seq	F	M00055802:612	CH15CON
2357	14929	RTA22200014F.i.15.2.P.Seq	F	M00056986:611	CH16COP
2358	134702	RTA22200241F.n.23.1.P.Seq	F	M00026951:76	CH04MAL
2359	185649	RTA22200250F.g.08.1.P.Seq	F	M00027833:41	CH04MAL
2360	10702	RTA22200241F.b.05.1.P.Seq	F	M00026860:51	CH04MAL
2361	643955	RTA22200001F.k.21.1.P.Seq	F	M00042886:33	CH15CON
2362	643955	RTA22200004F.p.19.1.P.Seq	F	M00055841:29	CH15CON
2363	4455	RTA22200233F.o.08.1.P.Seq	F	M00021670:75	CH03MAH
2364	185567	RTA22200242F.c.16.1.P.Seq	F	M00026985:25	CH04MAL
2365	9115	RTA22200226F.e.04.1.P.Seq	F	M00005632:82	CH02COH
2366	14929	RTA22200015F.i.12.1.P.Seq	F	M00057100:59	CH16COP
2367	14929	RTA22200014F.i.15.1.P.Seq	F	M00056986:611	CH16COP
2368	4181	RTA22200244F.k.18.1.P.Seq	F	M00027203:88	CH04MAL
2369	5206	RTA22200238F.n.19.1.P.Seq	F	M00023002:710	CH03MAH
2370	825	RTA22200237F.c.05.1.P.Seq	F	M00022702:24	CH03MAH
2371	825	RTA22200238F.o.24.1.P.Seq	F	M00023020:79	CH03MAH
2372	825	RTA22200231F.d.09.1.P.Seq	F	M00007943:32	CH03MAH
2373	2748	RTA22200225F.d.18.1.P.Seq	F	M00005449:510	CH02COH
2374	2748	RTA22200238F.i.02.1.P.Seq	F	M00022934:23	CH03MAH
2375	2748	RTA22200225F.d.08.1.P.Seq	F	M00005445:12	CH02COH
2376	133512	RTA22200014F.a.15.2.P.Seq	F	M00056923:59	CH16COP
2377	2748	RTA22200237F.e.09.1.P.Seq	F	M00022719:612	CH03MAH
2378	642477	RTA22200008F.e.02.1.P.Seq	F	M00056338:26	CH15CON
2379	642477	RTA22200007F.n.16.1.P.Seq	F	M00056268:41	CH15CON
2380	2493	RTA22200236F.f.17.1.P.Seq	F	M00022624:32	CH03MAH
2381	5796	RTA22200235F.j.03.2.P.Seq	F	M00022508:32	CH03MAH
2382	3782	RTA22200236F.k.02.1.P.Seq	F	M00022655:410	CH03MAH
2383	884	RTA22200016F.b.01.1.P.Seq	F	M00057162:82	CH16COP
2384	5860	RTA22200238F.p.04.1.P.Seq	F	M00023023:63	CH03MAH
2385	5275	RTA22200226F.h.09.1.P.Seq	F	M00005675:72	CH02COH

Table 1

SEQ ID	CLUSTER	SEQ NAME	O	CLONE ID	LIBRARY
2386	3932	RTA22200233F.l.12.1.P.Seq	F	M00021626:34	CH03MAH
2387	884	RTA22200017F.a.17.1.P.Seq	F	M00057297:63	CH16COP
2388	4455	RTA22200235F.j.23.2.P.Seq	F	M00022517:53	CH03MAH
2389	5860	RTA22200236F.c.15.1.P.Seq	F	M00022598:45	CH03MAH
2390	5860	RTA22200232F.m.23.1.P.Seq	F	M00022143:310	CH03MAH
2391	372791	RTA22200003F.o.02.1.P.Seq	F	M00055721:55	CH15CON
2392	5206	RTA22200238F.o.14.1.P.Seq	F	M00023015:410	CH03MAH
2393	372791	RTA22200005F.o.07.1.P.Seq	F	M00055973:44	CH15CON
2394	2846	RTA22200228F.l.12.2.P.Seq	F	M00006873:512	CH02COH
2395	5275	RTA22200225F.g.17.1.P.Seq	F	M00005469:17	CH02COH
2396	2846	RTA22200228F.i.21.2.P.Seq	F	M00006852:37	CH02COH

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
101	U73106	Liriodendron tulipifera high-pI laccase (LAC2-4) mRNA, complete cds	4.9
102	M63897	Bacillus thuringiensis insecticidal crystal protein (CryIF) gene, complete cds.	4.8
103	X75014	M.musculus Phox2 mRNA for homeodomain protein	4.4
104	X77320	A.officinalis L. unknown mRNA	4.1
105	M64982	Human fibrinogen alpha chain gene, complete mRNAs.	4.1
106	U28241	Gallus gallus collapsin-3 mRNA, partial cds.	4.1
107	M36860	Human elastin mRNA, complete cds.	4.1
108	X99641	M.musculus mRNA for HP1 alpha protein	4.1
109	X92557	S.erythraea pccB, bcpA2, and orfX genes	4
110	M21514	Rinderpest virus fusion protein mRNA, complete cds.	4
111	M64982	Human fibrinogen alpha chain gene, complete mRNAs.	4
112	D87218	Trypanosoma cruzi mRNA, partial cds, clone:TcEST002	4
113	M27273	E.coli rafA, rafB, and rafD genes encoding alpha-D-galactosidase, raf-permease, and raf-invertase, complete cds.	3.9
114	U50065	Caenorhabditis elegans cosmid T23A7.	3.9
115	X76186	Rinderpest virus (RBOK vaccine) mRNA for matrix protein	3.9
116	L05165	Gorilla gorilla glycophorin-gene related sequence.	3.9
117	M77212	Apis koschevnikovi mitochondrial cytochrome oxidase II gene, complete cds.	3.9
118	U64453	Human ELK1 pseudogene (ELK2) and immunoglobulin heavy chain gamma pseudogene (IGHGP)	3.9
119	M87502	Rotavirus SA114F nonstructural protein 34 (NS34) mRNA, complete cds.	3.9
120	L24376	Bacillus subtilis ribosomal protein L7/12 (rplL) gene, beta subunit of RNA polymerase (rpoBC) gene, 3' end, complete cds, 5' end.	3.9
121	U97143	Rattus norvegicus RET ligand 2 (RETL2) mRNA, complete cds	3.9
122	M95610	Human alpha 2 type IX collagen (COL9A2) mRNA, partial cds.	3.9
123	M21890	Human alpha-1-antitrypsin like (PIL) pseudogene, exon 2.	3.9

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
124	NM_002205.1	Homo sapiens integrin, alpha 5 (fibronectin receptor, alpha polypeptide) (ITGA5) mRNA > :: emb|X06256.1|HSFNRA Human mRNA for integrin alpha 5 subunit	3.9
125	U38949	Gallus gallus cardiac C-protein mRNA, complete cds.	3.9
126	U04985	Simian immunodeficiency virus clone SIVsm62J vpx gene, partial cds, env, nef, tat and rev genes, complete cds.	3.9
127	U05237	Human fetal Alz-50-reactive clone 1 (FAC1) mRNA, complete cds.	3.9
128	X96616	P.primaurelia gene encoding 156D surface antigen	3.8
129	U31929	Human orphan nuclear receptor (DAX1) gene, complete cds	3.8
130	X13523	Yeast CBS2 gene for cytochrome b translational activator protein	3.8
131	M57769	Chinese vaccinia virus I segment DNA fragment.	3.8
132	U08443	HIV-1 isolate 652 clone 11 from Haiti, envelope glycoprotein (env) gene, partial cds.	3.8
133	L39876	Caldicellulosiruptor saccharolyticus alpha-dextrin 6-glucanohydrolase (pulA) and pepX genes, complete cds and pepY gene, partial cds	3.8
134	M20363	Soybean heat-shock protein (Gmhsp26-A) gene, complete cds.	3.8
135	J02836	Mouse beta-glucuronidase gene, complete cds..	3.8
136	U64880	Eubacterium thermomarinus ribonuclease P RNA	3.8
137	X93520	E.caballus microsatellite DNA marker (clone ASB6)	3.8
138	Z83151	H.sapiens Fanconi anaemia group A gene, exon 6	3.8
139	D28484	Aspergillus oryzae pgkA gene for phosphoglycerate kinase, complete cds > :: dbj|E04898|E04898 gDNA encoding phosphoglycerate kinase	3.8
140	Z28091	S.cerevisiae chromosome XI reading frame ORF YKL091c	3.8
141	V01291	Yeast gene for alcohol dehydrogenase	3.8
142	U44843	Lactococcus lactis plasmid pND324, complete sequence	3.8
143	M13496	Chicken type X collagen gene.	3.8
144	Y14946	Homo sapiens mRNA for SPIN protein	3.8
145	U94776	Human muscle glycogen phosphorylase (PYGM) gene, exons 6 through 17	3.8
146	U43844	Mus musculus cyclin D3 gene, complete cds	3.8
147	X03431	Drosophila melanogaster transposable element 297	3.8

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
148	U05237	Human fetal Alz-50-reactive clone 1 (FAC1) mRNA, complete cds.	3.8
149	U92856	Comptonia peregrina maturase (matK) gene, chloroplast gene encoding chloroplast protein, complete cds	3.8
150	X94165	Human papillomavirus type 73 E6, E7, E1, E2, E4, L2, and L1 genes	3.7
151	U47875	Drosophila azteca NDSSC 14012-0171.6 glycerolphosphate dehydrogenase (Gpd) gene, partial cds	3.7
152	X02882	Human HLA class II alpha chain gene DZ-alpha	3.7
153	AF005932	Clavispora opuntiae Spt3 (SPT3) gene, complete cds	3.7
154	Z11840	D.melanogaster hedgehog gene DNA	3.7
155	U06745	Arabidopsis thaliana ecotype Landsberg K+ transport system AKT1 gene, complete cds.	3.7
156	U63362	Unidentified crenarchaeote 16S ribosomal RNA gene, 5' partial sequence	3.7
157	D30810	Wheat gene for transcription factor HBP-1b(c38), final exon, partial cds	3.7
158	X56089	X. laevis mRNA for alpha-subunit of G-protein, type G alpha-i-1	3.7
159	X07701	Chironomus tentans Balbiani ring mRNA BR 2.1 3'-end	3.7
160	X64649	G.gallus mRNA for restrictin	3.7
161	Y13426	Homo sapiens TCRDV2 gene, partial	3.7
162	Y14443	Homo sapiens mRNA for zinc finger protein	3.7
163	U92794	Mus musculus alpha glucosidase II beta subunit mRNA, complete cds	3.7
164	Y09480	A.europaeus genes encoding dehydrogenase and cytochrome c	3.7
165	NM_001659.1	Homo sapiens ADP-ribosylation factor 3 (ARF3) mRNA > :: gb|M74491|HUMADPRF3A Human ADP-ribosylation factor 3 mRNA, complete cds.	3.7
166	L20893	Rice yellow mottle virus complete genome.	3.7
167	AF019759	Canis familiaris beta-glucuronidase (GUSB) mRNA, complete cds	3.7
168	U62587	Cricetulus griseus beta-1,6-N-acetylglucosaminyltransferase Lec4A cell line point mutant mRNA, complete cds	3.7
169	D50085	Cucumis sativus mRNA for NADPH-protochlorophyllide oxidoreductase, complete cds	3.7
170	M81890	Human interleukin 11 (IL11) gene, complete mRNA.	3.7

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
171	M57765	Human interleukin 11 mRNA, complete cds.	3.7
172	X55880	T. reesei ura3 (OMPdecase) gene for orotidine-5'-phosphate decarboxylase (EC 4.1.1.23)	3.6
173	J03028	P.falciparum dihydrofolate reductase-thymidylate synthase gene, complete cds.	3.6
174	AF000949	Canis familiaris keratin (KRT9) gene, complete cds	3.6
175	U78718	Dugesia tigrina 26S ribosomal RNA gene, partial sequence	3.6
176	D16471	Human mRNA, Xq terminal portion	3.6
177	X69838	H.sapiens mRNA for G9a	3.6
178	M24685	Human angiotensinogen (AGT) gene, exon 1.	3.6
179	L05468	Trichomonas vaginalis beta-tubulin (btub1) gene, complete cds.	3.6
180	Y08926	P.falciparum mRNA for AARP1 protein, partial	3.6
181	M59743	Rabbit cardiac muscle Ca-2+ release channel	3.6
182	X51952	Human UCP gene for uncoupling protein exons 1 and 2	3.6
183	U25180	Candida albicans phosphoglycerate kinase (PGK1) gene, complete cds.	3.6
184	X58080	Maize chloroplast ORF170 and psaA gene	3.6
185	Z24609	H. sapiens (D1S502) DNA segment containing (CA) repeat; clone AFM361td9; single read	3.6
186	M24936	Mus musculus (BALB/c) L1 repeat insertion in the kappa chain 5' flank.	3.6
187	U50951	Thermoanaerobacterium thermosulfurigenes orfA gene, partial cds, polygalacturonase precursor (pglA), abcA, abcB and sigma factor (sigA) genes, complete cds	3.6
188	U57999	Mus musculus prosaposin (psap/SGP-1) gene, complete cds.	3.6
189	AF000949	Canis familiaris keratin (KRT9) gene, complete cds	3.6
190	S54325	nucleoprotein [tomato chlorotic spot virus, isolate BR-03, Genomic RNA, 929 nt]	3.6
191	S70572	{endogenous retrovirus SY-3, provirus} [human, lymphocytes, Genomic, 2189 nt]	3.6
192	AE000092	Rhizobium sp. NGR234 plasmid pNGR234a, section 29 of 46 of the complete plasmid sequence	3.6
193	U75285	Homo sapiens apoptosis inhibitor survivin gene, complete cds	3.6
194	X91404	W.mirabilis mRNA for phosphoenolpyruvate carboxylase	3.6

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
195	M17376	Mouse alpha-1-acid glycoprotein I (AGP-1) gene, complete cds.	3.6
196	Z73360	Human DNA sequence from cosmid 92M18, BRCA2 gene region chromosome 13q12-13	3.6
197	L05364	Arabidopsis thaliana polyubiquitin (ubq7) gene sequence.	3.6
198	J04353	Human papillomavirus type 31 (HPV-31) complete genome.	3.6
199	X03882	Paramecium primaurelia gene for G surface protein	3.6
200	U53152	Caenorhabditis elegans cosmid K11D5.	3.6
201	M65126	Human snRNP E protein pseudogene EB.	3.6
202	J04186	Yeast (S.cerevisiae) lysyl-tRNA synthetase (KRS1) alpha-2 subunit gene, complete cds.	3.6
203	L35281	Mus musculus (clone MKT6) morphogenetic protein 1 (BMP-1/His), alternative splice	3.6
204	D83390	Gallus gallus mRNA for connectin/titin, partial cds	3.6
205	U22103	Glycine max partial SIRE-1 sequence gag-protease polyprotein mRNA, complete cds	3.6
206	U82705	Human interferon alpha2 upstream scaffold associated region 3 (SAR3) and non-SAR region DNA	3.6
207	U39389	Rhagoletis cerasi 16S ribosomal RNA gene, mitochondrial gene encoding mitochondrial RNA, partial sequence	3.5
208	X13287	Medicago sativa nodulin-25 gene	3.5
209	X91337	H.sapiens La/SS-B pseudogene 2	3.5
210	M19684	Human alpha-1-antitrypsin-related protein gene, exons 3, 4 and 5.	3.5
211	M35296	Human tyrosine kinase arg gene mRNA.	3.5
212	X88000	S.tenacellus mRNA for ubiquinol:cytochrome c oxidoreductase	3.5
213	M61906	Human P13-kinase associated p85 mRNA sequence.	3.5
214	Z29084	C.butyricum transposon containing tbcC gene	3.5
215	M92039	Gallus gallus violet sensitive cone opsin mRNA, complete cds.	3.5
216	D86478	Schizosaccharomyces pombe DNA for Crb2, complete cds	3.5
217	U35737	Saccharomyces cerevisiae nuclear polyadenylated RNA binding protein (NAB4) gene, complete cds.	3.5
218	M22860	B.thuringiensis 20 and 67 kd mosquitocidal protein genes, complete cds and IS231-like transposase, 3' end.	3.5

Table 2A Nearest Neighbor (BlastN vs GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
219	Z57857	H.sapiens CpG island DNA genomic Mse1 fragment, clone 1d10, forward read cpg1d10.f1a	3.5
220	U07059	Pneumocystis carinii clone PC14103 major surface glycoprotein mRNA, complete cds.	3.5
221	X52978	H.sapiens gene for lipoprotein lipase	3.5
222	M24566	Dictyostelium discoideum tRNA-Glu-GAA gene, clone yGluGAA2.	3.5
223	U11058	Homo sapiens calcium dependent potassium channel alpha subunit (MaxiK) mRNA, complete cds	3.5
224	M21514	Rinderpest virus fusion protein mRNA, complete cds.	3.5
225	X80454	HIV type 1 (CA7) env-gene	3.5
226	X98695	Bacteriophage T4 modA and modB genes	3.5
227	X76186	Rinderpest virus (RBOK vaccine) mRNA for matrix protein	3.5
228	S82456	PGHS-2=prostaglandin endoperoxide H synthase-2	3.5
229	D85194	Arabidopsis thaliana mRNA, partial cds	3.5
230	L35661	Homo sapiens (subclone H8 4_b9 from P1 35 H5 C8) DNA sequence.	3.5
231	L76205	Colletotrichum gloeosporioides non-LTR retrotransposon CgT1 DNA.	3.5
232	NM_000464.1	Homo sapiens xeroderma pigmentosum, complementation group F (XPF) mRNA > :: gb|U64315|HSU64315 Human DNA repair endonuclease subunit	3.5
233	X02155	Bovine mRNA fragment for thyroglobulin N-terminal region	3.5
234	D16437	Synechococcus sp. DNA for PacS, complete cds	3.5
235	X97570	Z.mays dek34 gene	3.5
236	S65225	PEP-19=neuron-specific [mice, Genomic, 1358 nt, segment 1 of 3]	3.5
237	U33099	Human immunodeficiency virus type 1 isolate GM4, envelope glycoprotein (env) gene, V1-V5 region, partial cds	3.5
238	X71604	H.sapiens son-pseudogene	3.5
239	L47357	Homo sapiens TIMP1 gene, exon 1.	3.5
240	AF015490	Bos taurus immunoglobulin variable region mRNA, partial cds > :: gb|AF015492|AF015492 Bos taurus immunoglobulin variable region mRNA, partial cds	3.4
241	U93308	Arabidopsis thaliana decoy (DECOY) gene, complete cds and valyl tRNA synthetase (valRS) gene, partial cds	3.4

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
242	Y12576	Arabidopsis thaliana mRNA for histone H2B	3.4
243	X07977	Aspergillus amstelodami mtDNA with ARS element	3.4
244	X70276	Yeast centromere-containing shuttle vector YCp50	3.4
245	J03268	Yeast (S.cerevisiae) polymerase I gene, complete cds.	3.4
246	AF013168	Homo sapiens hamartin (TSC1) mRNA, complete cds	3.4
247	M32476	Rat carcinoembryonic antigen-related protein	3.4
248	X83390	Albinaria coerulea complete mithochondria DNA	3.4
249	U63337	Mus musculus cyclin-dependent kinase-2 alpha	3.4
250	D85530	Human CpG island sequence, clone G0310	3.4
251	M92423	Human FK506-binding protein 12 (FKBP12) mRNA, exons 3 and 4, complete FKBP12A mRNA and complete cds.	3.4
252	AB002693	Mouse mRNA for ISBT, complete cds	3.4
253	L01057	Human (clone TRI-6) satellite I repeat region.	3.4
254	U11270	Human antithrombin III gene, exon 1 and partial cds.	3.4
255	AB000280	Rattus norvegicus mRNA for peptide/histidine transporter, complete cds	3.4
256	J03886	Rat skeletal muscle myosin light chain kinase, complete cds.	3.4
257	M16809	Yeast (S.cerevisiae) CLS4 gene encoding a Ca regulatory protein, complete cds.	3.4
258	X58286	Drosophila genes z600, gdl, Eip28/29 and mex1	3.4
259	X07267	Rat gene 33 5'-region	3.4
260	Z68129	H.sapiens IDH gamma gene and TRAP delta gene	3.4
261	X87241	H.sapiens mRNA for hFat protein	3.4
262	Z93650	O.bellus 28S rRNA gene, D2 variable region	3.4
263	D87471	Mus musculus mRNA for gsg3, complete cds	3.4
264	L34193	Ipomopsis aggregata chloroplast maturase	3.4
265	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	3.4
266	X17318	Zea mays chloroplast trnC gene, rpoB gene, rpoC1 gene, rpoC2 gene and rps2 gene for transfer RNA-Cys, RNA polymerase subunits beta, beta-1, beta-2 and ribosomal protein S2 respectively	3.4
267	L35661	Homo sapiens (subclone H8 4_b9 from P1 35 H5 C8) DNA sequence.	3.4

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
268	U25236	Human immunodeficiency virus type 1 clone XSH159D1D envelope glycoprotein (env) pseudogene, v1-v5 region, partial cds	3.4
269	L81392	Homo sapiens (subclone 1_c12 from P1 H39) DNA sequence	3.4
270	M60172	G.domesticus novel collagen protein mRNA, 3' end.	3.4
271	M15263	E.coli araBAD operon encoding L-ribulokinase, L-arabinose isomerase, and L-ribulose 5-phosphate 4-epimerase.	3.4
272	S53273	OMP=olfactory marker protein {promoter} [mice, Genomic, 800 nt]	3.4
273	U22056	Mus musculus fertilin alpha precursor (ADAM 1) mRNA, partial cds.	3.3
274	X63382	Antithamnion sp. rhodoplast genes atpI, atpH, atpG, atpF, atpD, atpA, orf1, orf2 and orf3	3.3
275	U67462	Methanococcus jannaschii section 4 of 150 of the complete genome	3.3
276	M24566	Dictyostelium discoideum tRNA-Glu-GAA gene, clone yGluGAA2.	3.3
277	L13609	Human catalase (CAT) gene, exon 1, 5' end.	3.3
278	Z11486	Pinus strobus L. mRNA for pine globulin-1	3.3
279	X03366	Bovine spleen trypsin inhibitor II (SI) gene	3.3
280	D49558	Human DNA for gastric inhibitory polypeptide receptor, exon 5, 6, 7, 8, 9, 10, 11 and 12	3.3
281	U52110	Sulfolobus solfataricus putative ribokinase and Dbh genes, complete cds, and putative ATPase gene, partial cds	3.3
282	M34663	Human chaperonin (HSP60) non-functional pseudogene 4.	3.3
283	X82303	P.groenlandica mitochondrial cytochrome b gene	3.3
284	D78174	Mouse cerebellum mRNA for Zic4 protein, complete cds	3.3
285	D86966	Human mRNA for KIAA0211 gene, complete cds	3.3
286	L13198	Clortridium perfringens type B beta-toxin gene, complete cds.	3.3
287	J05516	E.coli leucine-specific transport (LS-BP; LIV-BP) system (livHMGF) genes, complete cds.	3.3
288	M58318	Homo sapiens ala gene.	3.3
289	X57297	A. majus TAM1 gene for TNP1 and TNP2	3.3
290	U33099	Human immunodeficiency virus type 1 isolate GM4, envelope glycoprotein (env) gene, V1-V5 region, partial cds	3.3

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
291	D29809	Coptis japonica mRNA for S-adenosyl-L-methionine:scoulerine 9-O-methyltransferase, complete cds	3.3
292	M12727	Human T-cell surface antigen T3 delta-chain gene, exons 2,3,4 and 5, clone pKR-1.	3.3
293	X54601	Human MFD72 dinucleotide repeat DNA > :: gb|I31132|I31132 Sequence 44 from patent US 5582979	3.2
294	Y11740	H.sapiens whn gene, exon 1a and 1b	3.2
295	M24566	Dictyostelium discoideum tRNA-Glu-GAA gene, clone yGluGAA2.	3.2
296	S83358	focal adhesion kinase/pp125FAK/FAK + {alternatively spliced} [rats, striatum, mRNA, 4575 nt]	3.2
297	M68519	Human pulmonary surfactant-associated protein SP-A (SFTP1) gene, complete cds.	3.2
298	U22056	Mus musculus fertilin alpha precursor (ADAM 1) mRNA, partial cds.	3.2
299	AB005803.1	Homo sapiens DNA for histidine-rich glycoprotein, complete cds	3.2
300	M24566	Dictyostelium discoideum tRNA-Glu-GAA gene, clone yGluGAA2.	3.2
301	X66139	M.fascicularis mRNA for epididymal apical protein I	3.2
302	U16955	Plasmodium falciparum ATPase 2 gene, complete cds.	3.2
303	M87108	Human immunodeficiency virus type 2 (FOPOLC4) polymerase fragment.	3.2
304	U67585	Methanococcus jannaschii section 127 of 150 of the complete genome	3.2
305	U70559	Saccharomyces cerevisiae DNA repair/transcription protein Mms19p (MMS19) gene, complete cds	3.2
306	D88191	Chlorella Virus vChta-1 gene, complete cds	3.2
307	M32352	Mouse renin (Ren-1-d) gene, complete cds.	3.2
308	X64406	Marburg Virus RNA for ORF-2 and ORF-3	3.2
309	NM_002763.1	Homo sapiens prospero-related homeobox 1 protein (Prox 1) mRNA, complete cds	3.2
310	Y11681	Homo sapiens mRNA for mitochondrial ribosomal protein S12	3.2
311	S80986	svp[40]=svp-related nuclear receptor/retinoid signaling modulator [zebrafishes, mRNA, 3876 nt]	3.2
312	Z18630	R.norvegicus mRNA for J1-160/180 neural recognition molecule	3.2

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
313	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	3.2
314	X14336	Filamentous Bacteriophage I2-2 genome	3.1
315	U58884	Mus musculus SH3-containing protein SH3P7 mRNA, complete cds. similar to Human Drebrin	3.1
316	X66139	M.fascicularis mRNA for epididymal apical protein I	3.1
317	D90819	E.coli genomic DNA, Kohara clone #328(39.4-39.8 min.)	3.1
318	U78770	Mus musculus spasmolytic polypeptide (mSP) gene, complete cds	3.1
319	U06083	Human N-acetylgalactosamine 6-sulphatase	3.1
320	U48228	Plasmodium falciparum 5.8S ribosomal RNA gene, partial sequence, internal transcribed spacer 2, and large subunit ribosomal RNA gene, complete sequence	3
321	X95188	R.norvegicus mRNA for Pristanoyl-CoA Oxidase	3
322	Z34932	S.scrofa mRNA for protein phosphatase 2A 55 kDa regulatory subunit, alpha isoform (partial)	3
323	U40837	Ovine adenovirus terminal protein gene, partial cds, 52/55K, pIIIa, III, pVII, pX, pVI, II, endopeptidase and DNA binding protein genes, complete cds, and 100K hexon assembly protein gene, partial cds.	3
324	X77233	L.esculentum (de Ruiter 83G38) Adh2 gene	2.9
325	M81341	Plasmodium falciparum cysteine proteinase gene, complete cds.	2.8
326	X99832	H.sapiens CLN3 gene, complete CDS	2.7
327	M64703	N.crassa valyl-tRNA synthetase (cyt-20/un-3) gene.	2.1
328	AB001635.1	Homo sapiens DNA for cGMP-binding cGMP-specific phosphodiesterase (PDE5), exon 21 and complete cds	1.9
329	X12669	H.sapiens gene for arginase exon 8 and 3'-flanking region (EC 3.5.3.1)	1.8
330	M19238	Yeast (S.cerevisiae) ribosomal protein L44' gene, complete cds.	1.8
331	AE001665	Chlamydia pneumoniae section 81 of 103 of the complete genome	1.8
332	X15603	Human elastin gene, exon 1	1.8
333	AE000553.1	Helicobacter pylori 26695 section 31 of 134 of the complete genome	1.8
334	AB022333	obligately oligotrophic bacteria POC-111 DNA for 16S rRNA, partial sequence	1.8

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
335	X51666	S.cerevisiae DNA for SEC62 gene	1.8
336	X16588	B. nigra repeat DNA (clone pBN 35)	1.8
337	U19253	Xenopus laevis/gilli complement component C3 mRNA, partial cds.	1.8
338	U32770	Haemophilus influenzae Rd section 85 of 163 of the complete genome	1.7
339	U64618	Propithecus verreauxi epsilon globin gene, 5' flanking region and exons 1-3, complete cds	1.7
340	U39700	Mycoplasma genitalium section 22 of 51 of the complete genome	1.7
341	Z82656	R.prowazekii genomic DNA fragment (clone A45F)	1.7
342	AL049337.1	Homo sapiens mRNA; cDNA DKFZp564P016 (from clone DKFZp564P016)	1.7
343	Z60848	H.sapiens CpG island DNA genomic Mse1 fragment, clone 36g10, forward read cpg36g10.ft1a	1.7
344	Z28054	S.cerevisiae chromosome XI reading frame ORF YKL054c	1.7
345	S79213	phosphatase inhibitor-2=cytosolic regulatory subunit of type 1 protein phosphatase [rats, brain, mRNA, 867 nt]	1.7
346	X82265	C.anuum mRNA for 1-aminocylopropane-1-carboxylate synthase	1.6
347	U46561	Tetrahymena thermophila polyubiquitin (TTU3) gene, complete cds, and RNA polymerase II subunit 2	1.5
348	M12132	Quail fast skeletal muscle troponin I gene, complete cds.	1.5
349	X98097	M.musculus CD22 promoter region	1.4
350	D29963	Homo sapiens mRNA for CD151, complete cds	1.4
351	D10471	Herpes simplex virus type 2 genomic DNA for 0.74-0.84 region, complete cds	1.4
352	U34673	Micoureus demerarae cytochrome b light strand gene, mitochondrial gene encoding mitochondrial protein, complete cds.	1.3
353	M15274	Human Pro-tRNA and Leu-tRNA genes.	1.3
354	AJ000486	Trichomonas vaginalis mgl1 gene	1.3
355	Z47075	Caenorhabditis elegans cosmid E02H1, complete sequence [Caenorhabditis elegans]	1.3
356	NM_001854.1	Homo sapiens collagen, type XI, alpha 1 type XI collagen (COL11A1) mRNA, complete cds.	1.3
357	U37056	Clostridium cellulovoran endo-1,4-beta glucanase EngF (engF) gene, complete cds	1.3

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
358	U53328	Human cyclin G mRNA, complete cds.	1.3
359	Z48230	Caenorhabditis elegans cosmid F42G10, complete sequence [Caenorhabditis elegans]	1.3
360	L42102	Homo sapiens (subclone 2_c7 from P1 H25) DNA sequence.	1.3
361	X89417	S.cerevisiae DNA for protein phosphatase T gene	1.3
362	Z79884	H.sapiens chromosome 22 CpG island DNA genomic Mse1 fragment, clone 303c5, complete read	1.3
363	Z68129	H.sapiens IDH gamma gene and TRAP delta gene	1.3
364	U13800	Human insulin-like growth factor I (IGF1) gene, intron 4.	1.3
365	L28995	Oryza sativa 3-hydroxy-3-methylglutaryl coenzyme A reductase gene, complete cds.	1.3
366	L43493	Saccharomyces cerevisiae Jsn1 gene, complete cds	1.3
367	X08066	Caenorhabditis elegans myo-2 gene for myosin heavy chain 2 (MHC-C)	1.3
368	U37056	Clostridium cellulovoran endo-1,4-beta glucanase EngF (engF) gene, complete cds	1.3
369	U19905	Rickettsia tsutsugamushi TA716 56 kDa type-specific antigen gene, complete cds.	1.3
370	U74496	Human chromosome 4q35 subtelomeric sequence	1.3
371	U46781	Pasteurella haemolytica putative coproporphyrinogen III oxidase (hemN') gene, partial cds, leukotoxin transcriptional activator and restriction modification methylase subunit (alxA-hsdM), (hsdS) and	1.3
372	X77300	S.scrofa genomic DNA microsatellite SO344	1.3
373	U53745	Feline immunodeficiency virus isolate FIV-Pco336-7 pol polyprotein (pol) gene, partial cds	1.3
374	L08266	Mouse Facc mRNA, complete cds.	1.3
375	X52519	Human gene for tyrosine aminotransferase (TAT)	1.3
376	U87543	Aedes aegypti steroid hormone receptor homolog protein gene, complete cds	1.3
377	D16682	Mycoplasma hyopneumoniae gene for 46 kDa surface antigen, complete cds	1.3
378	AF022725	Hordeum vulgare limit dextrinase (HvLD99) gene, complete cds	1.3
379	L18987	Human alpha-2 type XI collagen mRNA, partial cds.	1.3
380	Y09400	S.scrofa mRNA for apical organic cation transporter protein	1.3

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
381	U10117	Human endothelial-monocyte activating polypeptide II mRNA, complete cds.	1.3
382	U02618	Saccharomyces cerevisiae molasses resistance	1.3
383	Z60848	H.sapiens CpG island DNA genomic Mse1 fragment, clone 36g10, forward read cpg36g10.ft1a	1.3
384	X63203	H.sapiens gene for pregnancy specific beta-1 glycoprotein > :: gb|S49771|S49771 pregnancy-specific beta 1 glycoprotein {5' region, promoter} [human, placenta, Genomic, 3036 nt]	1.3
385	L31854	Mus musculus Ig epsilon-chain C gene, exon 4, M gene, exon 1.	1.3
386	X16588	B. nigra repeat DNA (clone pBN 35)	1.3
387	U25342	Xenopus laevis epithelial sodium channel, gamma subunit (gammaxENaC) mRNA, complete cds.	1.3
388	L40806	Neurospora crassa open reading frame gene, complete cds, met-10+ gene, complete cds	1.3
389	S49760	diacylglycerol kinase [rats, brain, mRNA, 3043 nt]	1.3
390	L15328	Saccharomyces cerevisiae RNA helicase gene, complete cds.	1.3
391	S50809	protein LG=immunoglobulin binding protein Recombinant, 1365 nt]	1.3
392	U14662	Baboon herpesvirus HVP2 gB glycoprotein (UL27) gene, complete cds.	1.3
393	U13173	Human intestinal H+/peptide cotransporter (Hpept1) gene, complete cds	1.3
394	W71212	me33e04.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 389310 5' similar to SW:S105_HUMAN P33763 S100 CALCIUM-BINDING PROTEIN A5 ;. > :: emb|X99921|MMS100A13 M.musculus mRNA for S100 calcium-binding protein A13	1.3
395	U25536	Petunia hybrida alcohol dehydrogenase-2 (Adh2) gene, promoter, 5'UTR, and partial cds.	1.3
396	X75014	M.musculus Phox2 mRNA for homeodomain protein	1.3
397	Z49436	S.cerevisiae chromosome X reading frame ORF YJL161w	1.3
398	X12780	Chicken MHC class I (B-F) mRNA F10	1.3
399	X04319	E. coli fhuB gene involved in transport of ferrichrome	1.3
400	U61297	Human progesterone receptor (PGR) gene, far 5' flanking region	1.3

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
401	X99518	Herpesvirus saimiri virion, transformation-associated region, strain C139	1.3
402	M24001	Mink enteritis virus antigenic type 2 capsid protein genes VP1 and VP2, complete cds.	1.3
403	U44877	Arabidopsis thaliana geranylgeranyl pyrophosphate synthase (GGPS3) mRNA, partial cds	1.3
404	AB003431	Incilaria fruhstorferi mRNA for Incilarin B, complete cds	1.3
405	M12792	Human steroid 21-hydroxylase (P-450(C21)) B gene, complete cds, clone lambda-C21B-1.	1.3
406	M28548	Human mutant 21-hydroxylase B gene, complete cds.	1.3
407	Y10260	H.sapiens EYA1A gene	1.3
408	U41740	Human trans-Golgi p230 mRNA, complete cds	1.3
409	X02295	Paramecium 5' region of gene for surface protein 51A	1.3
410	S45791	band 3-related protein=renal anion exchanger AE2 homolog [rabbits, New Zealand White, ileal epithelial cells, mRNA, 3964 nt]	1.3
411	AE000625.1	Helicobacter pylori 26695 section 103 of 134 of the complete genome	1.3
412	X16028	R.norvegicus gene encoding alkaline phosphatase, exon 3 and joined CDS	1.3
413	M73461	Saccharomyces cerevisiae FL100 RNA14 gene, complete cds.	1.3
414	L08845	Drosophila melanogaster disabled mRNA, complete cds	1.3
415	AE000635.1	Helicobacter pylori 26695 section 113 of 134 of the complete genome	1.2
416	L39962	Medicago sativa middle repetitive DNA	1.2
417	U55371	Caenorhabditis elegans cosmid T19F4.	1.2
418	X13679	Oryza sativa H3 histone pseudogene H3R-12	1.2
419	J00223	Homo sapiens epsilon-1 pseudogene (IGHEP1) gene, CH3 and CH4 regions, exons 3 and 4 and partial sequence	1.2
420	AE000649.1	Helicobacter pylori 26695 section 127 of 134 of the complete genome	1.2
421	X52256	A.thaliana tufA gene for elongation factor Tu	1.2
422	M81388	Chilo iridescent virus DNA-directed RNA polymerase and helicase genes, complete cds's. > :: gb|S75674|S75674 DNA helicase homolog, DNA-depenent RNA polymerase largest subunit homolog {fragment M} [Chilo iridescent virus CIV, insect iridescent virus type 6	1.2

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
423	S57565	histamine H2-receptor [rats, Genomic, 1928 nt]	1.2
424	X84347	H.sapiens mRNA for sperm adhesion molecule hPH-20	1.2
425	X53579	A.thaliana agamous (AG) gene	1.2
426	Y09539	L.japonicus gene encoding RING finger protein	1.2
427	L05500	Human fetal brain adenylyl cyclase mRNA, 3' end.	1.2
428	X68019	Feline Immunodeficiency Virus GAG gene	1.2
429	L76739	Human immunodeficiency virus type 2 (HIV-2 ARM) proviral surface glycoprotein (gp125) gene, partial cds. Type 2 partial envelope sequence, isolate arm from mother in vertical transmission case	1.2
430	L38769	Pisolithus tinctorius (F00035) mRNA, EST0049.	1.2
431	L39786	Lupinus angustifolius conglutin gamma gene, complete cds	1.2
432	D10510	Homo sapiens MAT gene for mitochondrial acetoacetyl CoA thiolase, exon 11	1.2
433	U47687	Streptococcus pneumoniae immunoglobulin A1 protease (iga) gene, complete cds	1.2
434	U63922	Xenopus laevis beta-transducin repeat containing protein-3 mRNA, partial cds	1.2
435	Z27234	S.tuberosum STACS2 gene for 1-Aminocyclopropane-1-carboxylate synthase	1.2
436	X65365.1	R.norvegicus GHF1 gene, exon 2B and alternative spliced 2A	1.2
437	X04336	Podospora anserina race A mitochondrial DNA class II intron downstream of alpha-sen DNA near CoI gene 5'end	1.2
438	X12864	Yeast (S.douglassi) NAM2 gene for mitochondrial leucyl-tRNA synthetase (EC 6.1.1.4)	1.2
439	U66032	Methanosarcina thermophila CO dehydrogenase/acetyl-CoA synthase alpha subunit (cdhA), epsiolon subunit (cdhB), beta subunit (cdhC), and NifH class IV protein homolog genes, complete cds, CO dehydrogenase/acetyl CoA synthas...	1.2
440	L08266	Mouse Facc mRNA, complete cds.	1.2
441	M64085	Mouse spi2 proteinase inhibitor (spi2/eb1) mRNA, 3' end.	1.2
442	X12773	Strongylocentrotus purpuratus Spec2d gene 5'-flank and exon 1	1.2
443	U13988	Peanut chlorotic streak caulimovirus, complete genome.	1.2

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
444	U23180	Caenorhabditis elegans cosmid C28F5	1.2
445	M20537	Mouse thyrotropin beta-subunit gene, exon 5.	1.2
446	U25881	Agrius cingulata NADH dehydrogenase subunit 1 protein, partial cds	1.2
447	Y08581	F.rubripes hsp70-4 gene, complete	1.2
448	L31848	Homo sapiens serine/threonine kinase receptor 2	1.2
449	M15840	Human interleukin 1-beta (IL1B) gene, complete cds.	1.2
450	Z23977	H. sapiens (D6S443) DNA segment containing (CA) repeat; clone AFM277wb5; single read	1.2
451	X14592	P.hybrida chsB gene for chalcone synthase	1.2
452	Z49900	P.sativum mRNA for small GTP-binding protein	1.2
453	U28154	Haemophilus somnus cryptic prophage genes, capsid scaffolding protein gene, partial cds, major capsid protein precursor, endonuclease, capsid completion protein, tail synthesis proteins, holin, and lysozyme genes, complet...	1.2
454	D13987	Brassica napus PE3-PEPCase gene for phosphoenolpyruvate carboxylase, complete cds	1.2
455	D45243	Mouse mRNA for ctk, complete cds	1.2
456	U81144	Caenorhabditis elegans non-alpha nicotinic acetylcholine receptor subunit precursor (unc-29) gene, complete cds	1.2
457	Z92970	Caenorhabditis elegans cosmid H06O01, complete sequence [Caenorhabditis elegans]	1.2
458	L44118	Homo sapiens proximal CMT1A-REP repeat	1.2
459	M17120	D.melanogaster achaete gene encoding nerve differentiation, complete cds.	1.2
460	U55737	Human ataxia-telangiectasia (ATM) exon 40	1.2
461	X63525	P.vulgaris loxA gene for lipoxygenase	1.2
462	D16402	Fruitfly Dcdrk gene for Dcdrk kinase, complete cds	1.2
463	M65287	Mouse activin receptor (ActR) mRNA, complete cds.	1.2
464	X13679	Oryza sativa H3 histone pseudogene H3R-12	1.2
465	D28484	Aspergillus oryzae pgkA gene for phosphoglycerate kinase, complete cds > :: dbj|E04898|E04898 gDNA encoding phosphoglycerate kinase	1.2
466	AE000283	Escherichia coli K-12 MG1655 section 173 of 400 of the complete genome	1.2
467	X99832	H.sapiens CLN3 gene, complete CDS	1.2
468	U06864	Rattus norvegicus follistatin-related protein precursor mRNA, complete cds.	1.2

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
469	M87710	Human simple repeat polymorphism.	1.2
470	M64497	Human apolipoprotein AI regulatory protein (ARP-1) mRNA, complete cds.	1.2
471	M87710	Human simple repeat polymorphism.	1.2
472	X60196	D.melanogaster partial Mhc gene for myosin heavy chain	1.2
473	X99719	S.enterica hsdM, hsdS & hsdR genes	1.2
474	Z95706	Microtus rossiaemeridionalis repetitive DNA	1.2
475	L76372	Musca domestica (clone F0) arylphorin mRNA fragment.	1.2
476	D26359	Exogenous mouse mammary tumor virus gene for superantigen, complete cds	1.2
477	NM_000694.1	Homo sapiens aldehyde dehydrogenase 7 (ALDH7) mRNA > :: gb|U10868|HSU10868 Human aldehyde dehydrogenase ALDH7 mRNA, complete cds.	1.2
478	AF015882	Caenorhabditis elegans protein tyrosine phosphatase (ptp-2) mRNA, complete cds	1.2
479	M58047	Mouse 2',3'-cyclic-nucleotide 3'-phosphodiesterase gene, exon 2.	1.2
480	U71121	Arabidopsis pyruvate decarboxylase-1 (Pdc1) gene, complete cds	1.2
481	U60804	Danio rerio tumor suppressor p53 (p53) mRNA, complete cds	1.2
482	X99254	P.falciparum gene encoding primase, small subunit	1.2
483	D10197	Bovine mRNA for histamine H1 receptor, complete cds	1.2
484	Y09764	Homo sapiens GABRE gene, exon 2-8	1.2
485	U72396	Lycopersicon esculentum class II small heat shock protein Le-HSP17.6 mRNA, complete cds	1.2
486	X72950	X.laevis H3l gene for histone H3	1.2
487	D29956	Human mRNA for KIAA0055 gene, complete cds	1.2
488	X56003	E.coli (plasmid pFM205) faeE and faeF genes	1.2
489	M64269	Human mast cell chymase gene, complete cds.	1.2
490	AB002963	Human immunodeficiency virus type 1 env gene for envelope glycoprotein, partial cds, clone 205E5B2t	1.2
491	X90846	H.sapiens mRNA for mixed lineage kinase 2	1.2
492	X03715	Spiroplasma melliferum tRNA gene cluster	1.2
493	U83494	Tropidurus hispidus ATPase subunit 6 (ATPase6) gene, mitochondrial gene encoding mitochondrial protein, partial cds	1.2
494	U60804	Danio rerio tumor suppressor p53 (p53) mRNA, complete cds	1.2

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
495	M24081	Tetrahymena pyriformis (clone pTU2) ubiquitin genes, 3'and 5' ends.	1.2
496	U54803	Mus musculus cysteine protease (Lice) gene, exons 3-7, and complete cds	1.2
497	L13748	Human dihydrolipoamide dehydrogenase gene, exon 1.	1.2
498	U29390	Chrysosporium parvum 18S ribosomal RNA gene, partial sequence	1.2
499	L81694	Homo sapiens (subclone 1_d1 from P1 H56) DNA sequence	1.2
500	X65366.1	R.norvegicus GHF1 gene, intron 2	1.2
501	U74651	Human DNA polymerase gamma (polg) gene, promoter region and partial cds	1.2
502	X65591	S.mansoni mRNA for myosin II heavy chain	1.2
503	D17255	Human HepG2 3' region MboI cDNA, clone hmd5c12m3	1.2
504	L33792	Senecio odorus lipid transfer protein mRNA, 3' end.	1.2
505	L13612	Drosophila melanogaster dead-box protein (dbp45A) gene, complete cds. > :: emb|Z23266|DMDEADBXA D.melanogaster DEAD-box gene, complete CDS	1.2
506	X81650	M.musculus mRNA for c-ros protooncogene	1.2
507	NM_000037.1	Homo sapiens ankyrin 1, erythrocytic (ANK1) mRNA > :: gb|M28880|HUMANK Human erythroid ankyrin mRNA, complete cds.	1.2
508	X98543	A.thaliana endo-1,4-beta-glucanase gene	1.2
509	D89501	Human PBI gene, complete cds	1.2
510	Z82174	Human DNA sequence from cosmid B20F6 on chromosome 22, complete sequence [Homo sapiens]	1.2
511	M36881	Human lymphocyte-specific protein tyrosine kinase	1.2
512	U92014	Human clone 121711 defective mariner transposon Hsmar2 mRNA sequence	1.2
513	U09948	Morone saxatilis Hox-B5-like homeodomain protein gene, partial cds	1.2
514	M58155	African swine fever virus multigene families 360 and 110.	1.2
515	U30500	Sicilian sandfly fever virus glycoprotein precursor polypeptide mRNA, complete cds.	1.2
516	L09190	Human trichohyalin (TRHY) gene, complete cds.	1.2
517	U67508	Methanococcus jannaschii section 50 of 150 of the complete genome	1.2

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
518	M81186	Clostridium botulinum neurotoxin type B (botB) gene, complete cds.	1.2
519	U93037	Homo sapiens elastin gene, exons 5-27 and alternatively spliced products, partial cds	1.2
520	D87454	Human mRNA for KIAA0265 gene, partial cds	1.2
521	D87558	Gallus gallus mRNA for C-Serrate-2, partial cds	1.2
522	Z32847	L.infantum (10541) kinetoplast DNA	1.2
523	U09584	Human PL6 protein (PL6) mRNA, complete cds.	1.2
524	AC001530	Homo sapiens (subclone 2_b8 from P1 H56) DNA sequence	1.2
525	X74322	H.sapiens gap-I gene	1.2
526	D29792	Mouse gene for T cell receptor gamma chain	1.2
527	M24001	Mink enteritis virus antigenic type 2 capsid protein genes VP1 and VP2, complete cds.	1.2
528	K02819	Rabbit MHC RLA region class I 19-1 gene, complete cds.	1.2
529	L33879	Insertion sequence IS1245 (from Mycobacterium avium) transposase gene, complete cds.	1.2
530	AE000607.1	Helicobacter pylori 26695 section 85 of 134 of the complete genome	1.2
531	W71212	me33e04.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 389310 5' similar to SW:S105_HUMAN P33763 S100 CALCIUM-BINDING PROTEIN A5 ;. > :: emb|X99921|MMS100A13 M.musculus mRNA for S100 calcium-binding protein A13	1.2
532	X83078	M.musculus nid gene (exon 4)	1.2
533	U95041	Rattus norvegicus transcriptional corepressor KAP1/TIF1B mRNA, partial cds	1.2
534	X58907	H.sapiens CYP21 gene for steroid 21-monooxygenase	1.2
535	L11669	Human tetracycline transporter-like protein mRNA, complete cds.	1.2
536	L37053	Gorilla gorilla (clone Gor-ID) Rhesus-like protein mRNA, complete cds.	1.2
537	M33782	Human TFEB protein mRNA, partial cds.	1.2
538	D78172	Spinacia oleracea mRNA for 26S proteasome beta subunit, complete cds	1.2
539	M33782	Human TFEB protein mRNA, partial cds.	1.2
540	M33782	Human TFEB protein mRNA, partial cds.	1.2
541	Z54312	L.sake las[A,M,P,T] genes	1.1
542	S81773	inwardly rectifying K+ channel IRK3(HIT) [hamsters, insulinoma cell line HIT-T15, mRNA Partial, 1791 nt]	1.1

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
543	Z78910	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA19B7	1.1
544	U08408	Xenopus laevis arginase 3 mRNA, complete cds.	1.1
545	U26444	Bacillus subtilis 2,3-dihydro-2,3-dihydroxybenzoate dehydrogenase (dhbA), isochorismate synthase (dhbC), 2,3-dihydroxybenzoate-AMP ligase (dhbE), and isochorismatase (dhbB) genes, complete cds, and (dhbF) gene, partial cds	1.1
546	X62170	N.crassa bli-7 gene	1.1
547	U94403	Rattus norvegicus proton gated cation channel ASIC1 mRNA, complete cds	1.1
548	AJ000498	Homo sapiens DNA for integration site of HBV in a hepatocellular carcinoma	1.1
549	X99485	L.luteus mRNA for alpha-subunit of G protein	1.1
550	U67520	Methanococcus jannaschii section 62 of 150 of the complete genome	1.1
551	L25415	Mycoplasma pulmonis glutamyl tRNA synthetase (gltX) gene, restriction-modification enzyme subunits S1A, R1, M1, S1B (hsds1A, hsdR1, hsdM1, hsds1B) genes, complete cds's, DNA polymerase III (polC) gene, 3' region.	1.1
552	X68107	M.sativa msCHSII mRNA for chalcone synthase	1.1
553	X89246	D.melanogaster mRNA for DHR38 protein	1.1
554	X64332	C.lewisii PgiC2-a gene for phosphoglucose isomerase	1.1
555	U47331	Rattus norvegicus metabotropic glutamate receptor 4b mRNA, complete cds.	1.1
556	X16055	Bacteriophage T4 gene 20 encoding gp20, structural protein of head	1.1
557	D00596	Homo sapiens gene for thymidylate synthase, exons 1, 2, 3, 4, 5, 6, 7, complete cds	1.1
558	X14639	Tomato ribosomal DNA intergenic spacer	1.1
559	U67520	Methanococcus jannaschii section 62 of 150 of the complete genome	1.1
560	Y11786	R.prowazekii ksgA gene and 2 open reading frames	1.1
561	Z81065	Caenorhabditis elegans cosmid F16C3, complete sequence [Caenorhabditis elegans]	1.1
562	X60694	C.perfringens plasmid epsilon-toxin gene	1.1
563	X52648	Schizosaccharomyces pombe p68 gene for p68 protein	1.1
564	X04078	Potato patatin pseudogene (SA10C)	1.1

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
565	U38783	Schizosaccharomyces pombe brefeldin A resistance protein (hba1) and unknown orf genes, complete cds	1.1
566	U32769	Haemophilus influenzae Rd section 84 of 163 of the complete genome	1.1
567	D89066	Staphylococcus aureus DNA for DnaA, complete cds	1.1
568	U07797	Rattus norvegicus Sprague-Dawley (T1-alpha) mRNA, complete cds.	1.1
569	L14710	C. elegans cosmid K02D10.	1.1
570	U42599	Borrelia burgdorferi plasmid cp18, OspE (ospE) gene, partial cds	1.1
571	U48726	Human epidermal growth factor receptor (EGFR) precursor-mRNA, exons 8 and 9, partial cds	1.1
572	U38844	Xenopus laevis cyclin-dependent kinase inhibitor p28 gene, complete cds	1.1
573	S82864	Elk-3=Ets transcription factor [mice, 16-day embryos, mRNA, 1526 nt]	1.1
574	X65720	M.musculus gene for protein kinase C-gamma (exon1 and exon 2)	1.1
575	D14484	Hepatitis C virus strain J33 genomic RNA, complete genome	1.1
576	L11998	Staphylococcus aureus conjugative transfer gene complex (trs).	1.1
577	D14339	Rice mitochondrion DNA for ATPase subunit 6 and ORFs, complete cds	1.1
578	D38413	Yeast DNA for Ppf2p, complete cds	1.1
579	D90210	Bacteriophage c-st (from C. botulinum) C1-tox gene for botulinum C1 neurotoxin	1.1
580	X67838	B.napus DNA for myrosinase	1.1
581	X17053	Rat immediate-early serum-responsive JE gene	1.1
582	X12426	Xenopus laevis U1 70K gene exon 4, 5, 6 and 7	1.1
583	U55043	Bacillus subtilis plasmid pPOD2000 Rep, RapAB, RapA, ParA, ParB, and ParC genes, complete cds.	1.1
584	M34046	Human placental protein 14 (PP14) gene, complete cds.	1.1
585	U52367	Clostridium acetobutylicum ATCC 824 F-type ATP synthase subunit a (atpA) gene, F-type ATP synthase subunit c (atpC) gene, and F-type ATP synthase subunit b	1.1
586	Z35955	S.cerevisiae chromosome II reading frame ORF YBR086c	1.1
587	U53179	Caenorhabditis elegans cosmid T27B2.	1.1

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
588	X77253	C.herbarum Cla h III mRNA > :: gb|I26207|I26207 Sequence 1 from patent US 5556953	1.1
589	X72713	A.franciscana mRNA for Sarco/endoplasmic reticulum Ca-ATPase	1.1
590	U29145	Caenorhabditis elegans (mab-18) mRNA, transcript	1.1
591	U06061	Cubanichthys pengelleyi mitochondrial control region, partial sequence	1.1
592	X62244	B.mycoides blacI gene for beta-lactamase I	1.1
593	M88355	Mouse oxytocin-neurophysin I gene, complete cds	1.1
594	U83489	Emericella nidulans septin B (aspB) mRNA, complete cds	1.1
595	M18193	Human inter-alpha-trypsin inhibitor heavy chain mRNA, partial cds, clones lambda-HuHITI-[9,33].	1.1
596	U71273	Sus scrofa glucosidase II mRNA, complete cds	1.1
597	S53497	immunoglobulin epsilon chain constant region=secreted form {3' region} [human, B cell myeloma U-266, Genomic, 3198 nt]	1.1
598	U25119	Caenorhabditis elegans calcium channel alpha-1 subunit homolog Unc-2 (unc-2) gene, partial cds.	1.1
599	U56959	Caenorhabditis elegans cosmid T21F4.	1.1
600	X99485	L.luteus mRNA for alpha-subunit of G protein	1.1
601	L35848	Homo sapiens IgE receptor beta chain (HTm4) mRNA, complete cds.	1.1
602	U93237	Human menin (MEN1) gene, complete cds	1.1
603	L07042	Medicago sativa MAP kinase MsERK1 mRNA, complete cds	1.1
604	Z36977	N.plumbaginifolia mRNA for catalase (cat3 gene)	1.1
605	J00738	Rattus norvegicus submaxillary gland alpha-2u globulin mRNA, complete cds.	1.1
606	X03018	Xenopus laevis histone gene cluster XlH3-A with genes H1A, H2B, H3 and H4	1.1
607	X68449	L.esculentum U6 snRNA pseudogene (LeU6.1ps)	1.1
608	U53921	Pneumocystis carinii major surface glycoprotein	1.1
609	M87106	Human immunodeficiency virus type 2 (FOPOLC2) polymerase fragment. > :: gb|M87107|HIVPOLC3 Human immunodeficiency virus type 2 (FOPOLC3) polymerase fragment.	1.1
610	U84539	Human dystrobrevin (DTN) gene, exon 11A	1.1
611	J02896	S.purpuratus speract egg protein mRNA, complete cds.	1.1
612	J02896	S.purpuratus speract egg protein mRNA, complete cds.	1.1
613	AF016253	Klebsiella aerogenes D-amino acid dehydrogenase	1.1

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
614	L22173	Saccharomyces cerevisiae aminonitrophenyl propanediol (ANP1), UV excision repair protein (RAD23), cytochrome c isozyme (CYC7) genes, complete cds.	1.1
615	U41357	Tetrahymena thermophila P-type ATPase (TPA11) gene, partial cds.	1.1
616	X14383	Bunyamwera virus L protein RNA, complete cds	1.1
617	U50378	Mus musculus DNA repair enzyme (Ku 70) gene, exon 13 and complete cds	1.1
618	Z18278	Mus musculus of 5HT5 receptor cDNA gene encoding 5HT5 serotonin receptor	1.1
619	U14172	Mus musculus p162 protein mRNA, complete cds.	1.1
620	X76762	H.sapiens serotonin transporter gene, exon 14	1.1
621	U62055	Bacillus subtilis CzcD (czcD) gene, partial cds, TrkA (trkA) gene, complete cds	1.1
622	X81847	E.carotovora pel1, pel2 and pel3 genes	1.1
623	M25477	Caenorhabditis elegans collagen (col6) gene, complete cds.	1.1
624	X97196	D.melanogaster X gene	1.1
625	L39059	Homo sapiens transcription factor SL1 mRNA, complete cds.	1.1
626	M21790	X.laevis complement component 3 (C3) mRNA, 3' end.	1.1
627	X95161	H.sapiens brca2 gene exon 11 > :: emb|A62786.1|A62786 Sequence 27 from Patent WO9719110	1.1
628	K02446	Chicken smooth-muscle alpha-tropomyosin gene, complete cds.	1.1
629	U24171	Mus musculus p21 (WAF1) gene, partial promoter sequence	1.1
630	Z26306	H.sapiens isoform 1 gene for L-type calcium channel, exons 42 and 43	1.1
631	U23070	Human putative transmembrane protein (nma) mRNA, complete cds	1.1
632	AE000046	Mycoplasma pneumoniae section 46 of 63 of the complete genome	1.1
633	X17548	D. melanogaster singed gene, exon 1	1.1
634	U54497	Xenopus laevis integrin alpha 4 mRNA, complete cds.	1.1
635	J02793	Mouse R and L1 (3' end) repetitive elements.	1.1
636	D10832	Equine herpesvirus genomic DNA for 'TREC' OCT-1/VMW65 cmplex	1.1
637	X51766	L.polyphyllus mRNA for ribosomal protein S16	1.1

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
638	U60804	Danio rerio tumor suppressor p53 (p53) mRNA, complete cds	1.1
639	Z79068	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA21G12	1.1
640	Z73585	S.cerevisiae chromosome XVI reading frame ORF YPL229w	1.1
641	U22818	Cricetulus griseus SRD-2 mutant sterol regulatory element binding protein-2 (SREBP-2) mRNA, complete cds.	1.1
642	M25710	Human thyroid peroxidase (TPO) gene, exon 11.	1.1
643	L12591	Human alkaline phosphatase gene, 5' flanking region.	1.1
644	L25616	Homo sapiens kinectin mRNA, complete cds	1.1
645	U32251	Bos taurus clone 9 immunoglobulin lambda light chain variable region (Vlambda1b) mRNA, partial cds	1.1
646	M97516	Mouse alpha-2 adrenergic receptor gene, complete cds.	1.1
647	AJ000060	Mus musculus gene encoding lysosomal hayluronidase, Hyal2	1.1
648	L07067	Simian varicella virus tegument protein gene, complete cds; serine/threonine protein kinase genes, complete cds; membrane glycoprotein genes, complete cds's.	1.1
649	L00619	Mouse T-cell-specific tyrosine kinase (Itk) mRNA, complete cds.	1.1
650	M76981	Glycine max vspA gene, complete cds.	1.1
651	D87460	Human mRNA for KIAA0270 gene, partial cds	1.1
652	D17466	Streptomyces setonii crtS gene for sigma factor, complete cds	1.1
653	D89066	Staphylococcus aureus DNA for DnaA, complete cds	1.1
654	X96853	P.persica mRNA for endo-beta-1,4-glucanase, pcel1	1.1
655	NM_002248.1	Homo sapiens potassium intermediate/small conductance calcium-activated channel, subfamily N, member 1 (KCNN1) mRNA > :: gb|U69883|HSU69883 Human calcium-activated potassium channel hSK1 (SK) mRNA, complete cds	1.1
656	Z63493	H.sapiens CpG island DNA genomic Mse1 fragment, clone 85c1, reverse read cpg85c1.rt1a	1.1
657	M21995	Human coagulation factor XIII a subunit gene, exon 9.	1.1

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
658	X60367	Mouse CRBPI mRNA for cellular retinol binding protein I (mCRBPI)	1.1
659	M63224	Wheat germin 9f-3.8 gene, complete cds.	1.1
660	M74515	Mouse GA binding protein (GABP-alpha subunit) mRNA, complete cds.	1.1
661	X52949.1	G.intestinalis DNA for rRNA tandem repeat unit	1.1
662	D11388	Rattus norvegicus gene for ribosomal protein S15, exon 1, 2, 3, 4, complete cds	1.1
663	U22302	Human histo blood group ABO glycosyltransferase	1.1
664	M38132	S.pombe rad1 gene, complete cds.	1
665	U07261	Perissodus microlepis T51a mitochondrion NADH dehydrogenase subunit 2 gene, complete cds	1
666	Z75244	S.cerevisiae chromosome XV reading frame ORF YOR336w	1
667	D63816	Mouse DNA for glutamate transporter Slc1a3, exon 1	1
668	U04699	Euproctus platycephalus mitochondrion 16S rRNA gene, partial sequence.	1
669	M19881	P.falciparum knop protein (KP) gene, complete cds.	1
670	X64310	H.sapiens DNA for pu-py sequence on 11p13	1
671	X56469	Mouse HSA-A gene coding for heat stable antigen	1
672	L76262	Meloidogyne hapla mitochondrial COII gene, 3' end of cds; transfer RNA-His gene; 16S ribosomal RNA gene; ND3 gene, complete cds; cytochrome b (cytb) gene, 5' end of cds.	1
673	X52574	Mouse mRNA from Mov10 locus	1
674	Z11711	H.sapiens gene for alpha-2 macroglobulin, exon 1	1
675	M37240	P.juncea N8 family repetitive sequence DNA.	1
676	Z72947	S.cerevisiae chromosome VII reading frame ORF YGR162w	1
677	X58713	N.crassa phr gene for photolyase	1
678	M30502	Human immunodeficiency virus type 2 (HIV-2), complete proviral genome.	1
679	M23082	Chicken embryo fibroblast tropomyosin mRNA, complete cds.	1
680	K03203	Human PRH1 locus salivary proline-rich protein mRNA (PIF allele).	1
681	M86844	Microtus chrotorrhinus tandem satellite array DNA sequence	1
682	U55381	Leishmania tropica P-glycoprotein E gene, complete cds	1

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
683	D11388	Rattus norvegicus gene for ribosomal protein S15, exon 1, 2, 3, 4, complete cds	1
684	L43496	Xenopus laevis ligase I (ligI) mRNA, complete cds	1
685	X69103	C.glutamicum csp2 gene	0.99
686	M32883	Alfalfa leghemoglobin gene, complete cds.	0.98
687	M30502	Human immunodeficiency virus type 2 (HIV-2), complete proviral genome.	0.98
688	K02212	Human alpha-1-antitrypsin gene (S variant), complete cds.	0.96
689	Y09746	H.oligactis mRNA for heat shock protein 70	0.96
690	D12580	Group II phytoplasma gene for 16S ribosomal RNA	0.95
691	L10465	Haematobia irritans (clone Horn.fly.3.7) mariner transposase pseudogene, partial cds.	0.95
692	U22541	Enterococcus hirae insertion sequence.	0.95
693	U66261	Caenorhabditis elegans multidrug resistance related protein 2 (mrp-2) mRNA, complete cds	0.93
694	L05517	Plasmodium chabaudi DNA sequence, exon 1.	0.91
695	S40532	NSCL-2=basic domain helix-loop-helix gene [mice, embryo, mRNA, 2230 nt]	0.91
696	L48339	Pseudomonas aureofaciens phzFABCD genes, complete cds's. > :: gb|AR008980|AR008980 Sequence 11 from patent US 5756087	0.65
697	X77515	R.rubrum nifJ gene	0.65
698	X51394	Xenopus mRNA for APEG protein, containing a highly repetitive amino acid sequence	0.65
699	AF097906	Rana catesbeiana myosin heavy chain (MHC-3) mRNA, partial cds	0.64
700	X64724	M.musculus NKR-P1 2 gene for natural killer cell receptor, exon 6	0.62
701	NM_001462.1	Homo sapiens formyl peptide receptor-like 1 (FPRL1) mRNA > :: gb|M84562|HUMFPRL1A Human formyl peptide receptor-like receptor (FPRL1) mRNA, complete cds.	0.61
702	AF110966.1	HIV-1 isolate C-96BW04.10 country Botswana, complete genome	0.6
703	Y10743	S.scrofa mRNA for p120-PI3K protein	0.6
704	U39669	Xenopus laevis pyruvate dehydrogenase E1-beta subunit (PdhE1beta-2) mRNA, partial cds	0.59
705	AJ004952	Bos taurus mRNA for fibroblast growth factor receptor type 1	0.59
706	AF125454	Caenorhabditis elegans cosmid Y47G7C	0.59
707	X59002	Leukemogenic retrovirus T1223/B env gene	0.59

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
708	Z73039	S.cerevisiae chromosome VII reading frame ORF YGR254w	0.59
709	Z28236	S.cerevisiae chromosome XI reading frame ORF YKR011c	0.58
710	U39669	Xenopus laevis pyruvate dehydrogenase E1-beta subunit (PdhE1beta-2) mRNA, partial cds	0.58
711	Z16651	H. sapiens (D10S199) DNA segment containing	0.58
712	X60163	Human TSK39.1 telomere junction	0.58
713	D10465	Zymomonas mobilis invA gene for intracellular invertase E1, complete cds	0.58
714	Z33280	M.capricolum DNA for CONTIG MC376	0.57
715	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	0.57
716	AB014572	Homo sapiens mRNA for KIAA0672 protein, complete cds	0.57
717	NM_002714.1	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA > :: emb|Y13247|HSFB19 Homo sapiens fb19 mRNA	0.57
718	M10630	Bacteriophage U3 cleavage site for phage phi-X174 gene A protein.	0.56
719	Z55474	H.sapiens CpG island DNA genomic Mse1 fragment, clone 42d3, reverse read cpg42d3.rt1a	0.56
720	U96697	Drosophila melanogaster DPP2C1 (dpp2c1) mRNA, complete cds	0.56
721	AC001048	Homo sapiens (subclone 1_f12 from P1 H55) DNA sequence	0.56
722	M32245	Human aromatase gene, 5' flank.	0.55
723	AF051944	Gallus gallus Xin mRNA, complete cds	0.55
724	AF077539	Caenorhabditis elegans cosmid T25D3	0.54
725	U43841	Entamoeba histolytica U6 small nuclear RNA gene, complete sequence	0.54
726	NM_000551.1	Homo sapiens von Hippel-Lindau syndrome (VHL) mRNA, and translated products	0.54
727	U55215	Cavia porcellus interleukin-5 receptor alpha precursor (gpIL-5ra) mRNA, complete cds	0.53
728	D16471	Human mRNA, Xq terminal portion	0.53
729	X76245	S.cerevisiae NOP77 gene for essential nucleolar protein	0.52
730	Z11993	V.proteolyticus aminopeptidase	0.51
731	L34620	Eubacterium fosser 16S ribosomal RNA.	0.49
732	U28757	Sus scrofa lysozyme gene, complete cds	0.49
733	U75187	Arabidopsis thaliana germin-like protein (GLP1) mRNA, complete cds	0.49

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
734	Z96514	H.sapiens telomeric DNA sequence, clone 2PTEL005, read 2PTELOO005.seq	0.48
735	AE000579.1	Helicobacter pylori 26695 section 57 of 134 of the complete genome	0.48
736	Y13852	Drosophila diplacantha clone D3 inactive Bari-1 family transposon	0.47
737	X14036	Tomato cab-7 gene for type II chlorophyll a/b-binding protein	0.47
738	X84308	H.vulgare mRNA for photosysteme I antenna protein	0.47
739	S78378	Oct-4 (t12 haplotype) [mice, Genomic, 1191 nt, segment 3 of 3]	0.46
740	NM_000254.1	Homo sapiens 5-methyltetrahydrofolate-homocysteine methyltransferase synthase mRNA, complete cds	0.46
741	L04161	Plasmodium falciparum (clone Pfg377 [PfsXLX]) DNA sequence, complete cds	0.46
742	X95887	H.sapiens PLP gene, intron 1	0.45
743	U38179	Rattus norvegicus cyclic nucleotide phosphodiesterase (RNPDE3A) mRNA, complete cds.	0.45
744	U41833	Macaca mulatta MHC class I antigen Mamu B*02 mRNA, complete cds	0.45
745	L01794	Plasmid pAD1 (from Enterococcus faecalis) replication associate protein (repA, repB, and repC) genes, complete cds.	0.45
746	U64573	Human connexin43 gap junction protein (connexin43) gene, exon 1 and promoter region	0.44
747	X60832	P.sativum gene (GS 3A) for glutamine synthase	0.44
748	Z93997	Unidentified bacterium DNA for 16S ribosomal RNA	0.44
749	U32818	Haemophilus influenzae Rd section 133 of 163 of the complete genome	0.44
750	AF018161	Sphaerozoum punctatum 16S-like ribosomal RNA gene, complete sequence	0.44
751	D78156	Human mRNA for rasGTPase activating protein, partial cds	0.44
752	AB000173	Porcine mRNA for endopeptidase 24.16, complete cds	0.44
753	M36626	Rat simple sequence DNA, clone 5.	0.44
754	Y09922	M.musculus flanking region of exon 1 of SEZ-6 gene including promoter sequence	0.44
755	X13602	Caldocellum saccharolyticum celB gene for cellobiohydrolase/endocellulase	0.44

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
756	AF005664	Homo sapiens properdin (PFC) gene, complete cds	0.44
757	M63312	Chinese hamster cAMP-dependent protein kinase, catalytic subunit-beta mRNA, complete cds.	0.44
758	U43382	Human Down Syndrome region of chromosome 21 DNA.	0.44
759	U75187	Arabidopsis thaliana germin-like protein (GLP1) mRNA, complete cds	0.44
760	U21914	Human duplicate spinal muscular atrophy mRNA, clone 5G7, partial cds.	0.43
761	AF010537	Plasmodium falciparum microsatellite TA3 sequence	0.43
762	X05034	Rat C2A gene for prostatic binding protein (PBP)	0.43
763	D16579	Dictyostelium discoideum mitochondrial DNA for NADH dehydrogenase subunits and cytochrome oxidase subunit	0.43
764	M58155	African swine fever virus multigene families 360 and 110.	0.43
765	Z82587	R.prowazekii genomic DNA fragment (clone A315R)	0.43
766	X13011	Bacillus subtilis DNA for glyceraldehyde-3-phosphate dehydrogenase (EC 1.2.1.12)	0.43
767	X59952	T.thermophila SB2040 micronuclear limited DNA element (F23)	0.43
768	Z70730	L.lactis gene for beta-phosphoglucomutase	0.43
769	X94445	S.pombe cwl1 gene	0.43
770	X63628	S.pombe MFm2 gene	0.43
771	X60049	O.berteriana mitochondrial nad5 gene for NADH dehydrogenase subunit 5, exons d and e	0.43
772	D45241	Rat MHC class II gene (RT1.DOa), exon 2, 3, 4 and 5	0.43
773	D83472.1	Bos taurus gene for adrenodoxin reductase, exon 1, 2	0.43
774	M34044	Pig Na+/glucose cotransporter protein (SGLT1) mRNA, 3' end.	0.43
775	U28488	Human putative G protein-coupled receptor (AZ3B) mRNA, complete cds	0.43
776	X89398	H.sapiens ung gene for uracil DNA-glycosylase	0.43
777	Z36879	F.pringlei gdcsPA gene for P-protein of the glycine cleavage system	0.43
778	M73760	Mouse serine protienase, complete cds.	0.43
779	Z36803	H.sapiens (xs151) mRNA, 355bp	0.43
780	M33940	Human Val-tRNA and Lys-tRNA genes.	0.43

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
781	M96159	Rattus norvegicus adenylyl cyclase type V mRNA, complete cds	0.43
782	X54134	Human HPTP epsilon mRNA for protein tyrosine phosphatase epsilon	0.43
783	Z73039	S.cerevisiae chromosome VII reading frame ORF YGR254w	0.43
784	AB002312	Human mRNA for KIAA0314 gene, partial cds	0.43
785	AB002312	Human mRNA for KIAA0314 gene, partial cds	0.43
786	U88667	Human ATP binding cassette transporter (ABCR) mRNA, complete cds	0.43
787	U88667	Human ATP binding cassette transporter (ABCR) mRNA, complete cds	0.43
788	Z65552	H.sapiens CpG island DNA genomic Mse1 fragment, clone 46b12, reverse read cpg46b12.rt1a	0.43
789	X15599	Phanerochaete chrysosporium LIP2 gene for lignin peroxidase	0.43
790	U22106	Drosophila melanogaster dopamine D1-like receptor mRNA, partial cds.	0.43
791	M13177	Mouse transforming growth factor beta mRNA	0.43
792	NM_002135.1	Homo sapiens hormone receptor (growth factor-inducible nuclear protein N10) (HMR) mRNA > :: gb|L13740|HUMTR3A Human TR3 orphan receptor mRNA, complete cds.	0.42
793	U19617	Mus musculus Ets-family transcription factor Elf-1 mRNA, complete cds	0.42
794	M60858	Human nucleolin gene, complete cds.	0.42
795	Z71179	Caenorhabditis elegans cosmid F07D3, complete sequence [Caenorhabditis elegans]	0.42
796	Z11804	D.discoideum ras gene	0.42
797	L07572	Equus caballus (clone GEN2-9) germline Ig lambda chain gene, J4-C4 region, last 2 exons. > :: gb|L07573|HRSIGLL Equus caballus (clone HVL1) germline Ig lambda chain gene, V4 region, partial cds.	0.42
798	L25637	Xenopus laevis HNF-3beta gene, complete cds.	0.42
799	AE000293	Escherichia coli K-12 MG1655 section 183 of 400 of the complete genome	0.42
800	Z55829	H.sapiens CpG island DNA genomic Mse1 fragment, clone 68a3, forward read cpg68a3.ft1a	0.42
801	Y11280	A.vinelandii yoh-1, ibpB, cynR, leuC, leuD, leuB, asd, usg-1 genes	0.42
802	Y08925	P.falciparum aarp3 gene, exon	0.42
803	X89961	H.sapiens DNA for MCS gene	0.42
804	X82330	A.hypogaea chi2.2 gene for chitinase (class II)	0.42

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
805	D89655	Rattus norvegicus mRNA for scavenger receptor class B, complete cds	0.42
806	U70730	Human SnoN2 mRNA, complete cds	0.42
807	Y09922	M.musculus flanking region of exon 1 of SEZ-6 gene including promoter sequence	0.42
808	X57638	Mouse mRNA for peroxisome proliferator activated receptor	0.42
809	M33196	Human Fc-epsilon-receptor gamma-chain gene, complete cds.	0.42
810	X13602	Caldocellum saccharolyticum celB gene for cellobiohydrolase/endocellulase	0.42
811	X13602	Caldocellum saccharolyticum celB gene for cellobiohydrolase/endocellulase	0.42
812	U23947	Mycoplasma pulmonis putative lipoprotein (lipA), VsaB lipoprotein (vsaB), VsaC2 lipoprotein (vsaC2), VsaE2 lipoprotein (vsaE2), VsaD lipoprotein (vsaD) genes, partial cds, VsaA lipoprotein (vsaA) gene, complete cds, VsaC1 l...	0.42
813	U37312	Sus scrofa clone ARO34B cytochrome P450 aromatase mRNA, complete cds	0.42
814	U70998	Phanerochaete chrysosporium manganese peroxidase isozyme 3 (mnp3) gene, complete cds	0.42
815	U70998	Phanerochaete chrysosporium manganese peroxidase isozyme 3 (mnp3) gene, complete cds	0.42
816	X59379	Mouse mRNA for amyloid beta precursor (protease nexin II)	0.42
817	X54134	Human HPTP epsilon mRNA for protein tyrosine phosphatase epsilon	0.42
818	Z32676	H.sapiens x11 gene, promoter region	0.42
819	U28938	Rattus norvegicus protein tyrosine phosphatase D30 mRNA, complete cds	0.42
820	L41867	Drosophila extra sex combs gene, exon 1-4, complete cds.	0.42
821	AF004659	Andes virus G1 protein gene, partial cds	0.42
822	U75187	Arabidopsis thaliana germin-like protein (GLP1) mRNA, complete cds	0.42
823	U27120	Chlamydomonas reinhardtii ADP-ribosylation factor (ARF) mRNA, complete cds.	0.42
824	U41759	Chlamydia psittaci RecJ recombination protein gene, partial cds and ORF2, ORF4, glutamyl-tRNA synthetase, outer membrane protein 3 (omp3), outer membrane protein 2 (omp2), and hypothetical sulfur-rich protein (srp) genes, ...	0.41

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
825	D12716	Candida maltosa ALK4 (CYP52D1) gene for n-alkane inducible cytochrome P-450, complete cds	0.41
826	J01261	P.vulgaris lectin gene, complete cds.	0.41
827	K00131	mouse b2 repeat sequence from clone mm61.	0.41
828	AF000949	Canis familiaris keratin (KRT9) gene, complete cds	0.41
829	U67580	Methanococcus jannaschii section 122 of 150 of the complete genome	0.41
830	X98568	H.sapiens type X collagen gene	0.41
831	X13595	Bean DNA for glycine-rich cell wall protein GRP 1.0	0.41
832	Y13852	Drosophila diplacantha clone D3 inactive Bari-1 family transposon	0.41
833	X53815	Human G6PD gene for glucose-6-phosphate dehydrogenase, partial	0.41
834	L34069	Bovine (clone p59K2) 3',5'-cyclic nucleotide phosphodiesterase (BTPDE1A1) mRNA, complete cds. > :: gb|I30433|I30433 Sequence 16 from patent US 5580771 > :: gb|I35677|I35677 Sequence 16 from patent US 5602019 > :: gb|AR016543|AR016543 Sequence 16 from pate	0.41
835	U26425	Human phospholipase C-beta-3 (PLCB3) gene, complete cds.	0.41
836	J04431	Homo sapiens transforming growth factor-beta 1 gb|I14074|I14074 Sequence 1 from patent US 5445941	0.41
837	U32802	Haemophilus influenzae Rd section 117 of 163 of the complete genome	0.41
838	U24676	Drosophila melanogaster twinstar (tsr) gene, complete cds	0.41
839	U87793	Bacillus thuringiensis kurstaki insecticidal delta-endotoxin CryIA(c) (cryIA(c)) gene, complete cds	0.41
840	L06446	Mus musculus domesticus insulin-like growth factor 2 receptor (Igf2r) gene, exon 2 and partial cds	0.41
841	X06660	Candida tropicalis POX9 gene for peroxisomal catalase (PXP-9) > :: dbj|E01922|E01922 DNA encoding catalase of Candida tropicalis	0.41
842	U05349	Equine rotavirus glycoprotein VP7 mRNA, complete cds.	0.41
843	L12058	Clostridium sordellii 7-alpha-hydroxysteroid dehydrogenase gene, complete cds.	0.41
844	X71327	M. musculus mRNA for MRE-binding transcription factor	0.41

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
845	AE000534.1	Helicobacter pylori 26695 section 12 of 134 of the complete genome	0.41
846	L33727	Mouse 43kDa acetylcholine receptor-associated protein (Rapsn) gene, exons 3-8	0.41
847	Y11270	E.histolytica INO1 gene	0.41
848	L10390	Camptotheca acuminata 3-hydroxy-3-methylglutaryl coenzyme A reductase gene, complete cds.	0.41
849	M34044	Pig Na+/glucose cotransporter protein (SGLT1) mRNA, 3' end.	0.41
850	M20543	Human skeletal alpha-actin gene, complete cds.	0.41
851	U97192	Caenorhabditis elegans cosmid C01F4	0.41
852	U65625	Mus musculus strain BALB/c IgH C alpha gene, 3' regulatory region enhancer E	0.41
853	X78344	S.cerevisiae CAT8 gene	0.41
854	Z26280	H.sapiens isoform 1 gene for L-type calcium channel, exon 39	0.41
855	Z23995	H. sapiens (D1S469) DNA segment containing (CA) repeat; clone AFM280za5; single read	0.41
856	X51394	Xenopus mRNA for APEG protein, containing a highly repetitive amino acid sequence	0.41
857	U72719	Streptococcus agalactiae heat shock protein 70 cds	0.41
858	M95673	Saccharomyces cerevisiae pta1 gene, complete cds.	0.41
859	U28938	Rattus norvegicus protein tyrosine phosphatase D30 mRNA, complete cds	0.41
860	NM_001072.1	Homo sapiens UDP glycosyltransferase 1 phenol UDP-glucuronosyltransferase (UDPGT) mRNA, complete cds.	0.41
861	Z72884	S.cerevisiae chromosome VII reading frame ORF YGR099w	0.41
862	X96883	H.sapiens spcDNA, tetranucleoid and O-LTR like repeat, clone 2-16	0.4
863	M14602	Human myoglobin gene, exon 2.	0.4
864	D00844	Gallus gallus mRNA for virus activating protease, complete cds	0.4
865	D49817	Homo sapiens mRNA for 6-phosphofructo-2-kinase/fructose-2, 6-bisphosphatase, complete cds	0.4
866	L78742	Homo sapiens (subclone 10_b11 from P1 H16) DNA sequence	0.4
867	X51772	Rat DNA for calpain II large subunit (EC 3.4.22.17) (exon 10)	0.4

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
868	U09473	Luxilus chrysocephalus chrysocephalus Meramec R., Jefferson Co., MO, USA, mitochondrion 12S rRNA and 16S rRNA genes, partial sequence, and tRNA-Val gene, complete sequence.	0.4
869	X52614	Maize chloroplast rps15 gene for ribosomal protein S15	0.4
870	U76524	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	0.4
871	M30467	D.discoideum uridine diphosphoglucose pyrophosphorylase (UDPGP1) gene, 5' end.	0.4
872	NM_002248.1	Homo sapiens potassium intermediate/small conductance calcium-activated channel, subfamily N, member 1 (KCNN1) mRNA > :: gb|U69883|HSU69883 Human calcium-activated potassium channel hSK1 (SK) mRNA, complete cds	0.4
873	M81686	Petunia hybrida Sx-protein	0.4
874	S39508	myelin P2 [mice, Genomic, 3694 nt]	0.4
875	U82966	Oryza sativa Ca2+-ATPase gene, complete cds	0.4
876	X16323	Human mRNA for hepatocyte growth factor (HGF)	0.4
877	U31631	Dictyostelium discoideum class II apurinic/apyrimidinic(AP)-endonuclease (DdapeA) gene, complete cds	0.4
878	X60753	P.sylvestris BBS gene for bibenzyl synthase	0.4
879	V00711	Mus musculus mitochondrial genome > :: gb|J01420|MUSMTCG Mouse mitochondrion, complete genome	0.4
880	U66274	Rattus norvegicus neuropeptide Y5 receptor (NPYR5) mRNA, complete cds	0.4
881	X83673	X.laevis SSB1 gene	0.4
882	X14036	Tomato cab-7 gene for type II chlorophyll a/b-binding protein	0.4
883	U76524	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	0.4
884	X64467	H.sapiens ALAD gene for porphobilinogen synthase	0.4
885	L81673	Homo sapiens (subclone 1_f8 from P1 H49) DNA sequence	0.4
886	L36887	Saccharomyces cerevisiae mitochondrion transfer RNA Leu, Gln, Lys, Arg, Gly, Asp, Ser2, Arg2, Ala, Ile, Tyr, Asn genes.	0.4
887	L24905	Bombyx mori nuclear polyhedrosis virus hr5 gene.	0.4
888	K00841	human beta-tubulin pseudogene, clone 21-beta.	0.4

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
889	K02819	Rabbit MHC RLA region class I 19-1 gene, complete cds.	0.4
890	L24905	Bombyx mori nuclear polyhedrosis virus hr5 gene.	0.4
891	X69491	G.gallus gene for gonadotrophin releasing hormone I	0.4
892	X95887	H.sapiens PLP gene, intron 1	0.4
893	Z96576	H.sapiens telomeric DNA sequence, clone 3PTEL001, read 3PTELOO001.seq	0.4
894	Z16503	H. sapiens (D1S196) DNA segment containing (CA) repeat; clone AFM063xg9; single read	0.4
895	M20572	Mouse interleukin 6 (IL-6) gene, complete cds.	0.4
896	AF022372	Candida albicans proteinase (Kex2) gene, complete cds	0.4
897	Z77964	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA4F5	0.4
898	Z58874	H.sapiens CpG island DNA genomic Mse1 fragment, clone 110g9, reverse read cpg110g9.rt1a	0.4
899	X53422	D. grimshawi s18, s15, s19 and s16 chorion protein genes	0.4
900	NM_002435.1	Homo sapiens mannose phosphate isomerase (MPI) mRNA > :: emb|X76057|HSRPMI H.sapiens PMI1 mRNA for phosphomannose isomerase	0.4
901	X05914	D. virilis mitochondrial DNA for origin of replication, small mitochondrial ribosomal RNA, transfer tRNAs tRNA-fMet, tRNA-Gln and tRNA-Ile	0.4
902	Z95179	G.gallus microsatellite DNA (LEI0290 (= EC11EO7))	0.4
903	X65627	M.musculus mRNA TNZ2 for p68 RNA helicase	0.4
904	U87940	Salmonella typhimurium hydroxyethyl thiazole kinase (thiM) and HMP-P kinase (thiD) genes, complete cds	0.4
905	U15450	Sus scrofa clone pvg13 Ig heavy chain variable VDJ region mRNA, partial cds.	0.4
906	M27902	Rat cardiac specific sodium channel alpha-subunit mRNA, complete cds.	0.4
907	U22893	Rattus norvegicus muscle Y-box protein YB2 mRNA, complete cds.	0.4
908	NM_003632.1	Homo sapiens neurexin 4 (contactin associated protein) (NRXN4) mRNA > :: gb|U87223|HSU87223 Homo sapiens contactin associated protein (Caspr) mRNA, complete cds	0.4

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
909	AF001504	Homo sapiens myasthenia gravis autoantigen gravin mRNA, partial cds	0.4
910	AB002384	Human mRNA for KIAA0386 gene, complete cds	0.4
911	U40145	Mus musculus Mdm2 (Mdm2) gene, complete cds.	0.4
912	NM_002714.1	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA > :: emb|Y13247|HSFB19 Homo sapiens fb19 mRNA	0.4
913	Y09762	Mokola virus genes encoding nucleoprotein, phosphoprotein, matrice protein, glycoprotein and polymerase	0.4
914	U75187	Arabidopsis thaliana germin-like protein (GLP1) mRNA, complete cds	0.4
915	Z82448	R.prowazekii genomic DNA fragment (clone A503F)	0.39
916	Z50864	L.delbrueckii sp. lactis plasmid pWS58 DNA, complete genome	0.39
917	K03196	Human interferon-beta-3 gene.	0.39
918	U66614	Marinococcus halophilus L-2,4-diaminobutyric acid acetyl transferase (ectA) gene, L-2,4-diaminobutyric acid transaminase (ectB) gene, ectoine synthase (ectC) gene, putative transposase orfA gene, complete cds, and putative...	0.39
919	L48522	Homo sapiens tuberin (TSC2) gene, exons 6, 7, and 8	0.39
920	Z68133	Caenorhabditis elegans cosmid F23C11, complete sequence [Caenorhabditis elegans]	0.39
921	U60973	Candida albicans oligopeptide transporter (OPT1) gene, complete cds	0.39
922	L31398	Mus musculus dynamin (UDnm) mRNA, complete cds.	0.39
923	X15966	Rabbit DNA for L1Oc4 repeat	0.39
924	Z95122	Caenorhabditis elegans cosmid VZC374L, complete sequence [Caenorhabditis elegans]	0.39
925	X55036	M.musculus long mosaic repeated sequence (LMRS)	0.39
926	U35640	Arabidopsis thaliana thioredoxin h (TRX3) gene, complete cds	0.39
927	V00094	Fibroin gene intervening sequence from Bombyx mori (silk moth), with 5' flank and partial coding sequence	0.39
928	U47687	Streptococcus pneumoniae immunoglobulin A1 protease (iga) gene, complete cds	0.39
929	Z93381	Caenorhabditis elegans cosmid F28G4, complete sequence [Caenorhabditis elegans]	0.39

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
930	U76524	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	0.39
931	X71600	H.sapiens DNA sequence of polymorphic pentanucleotide repeat	0.39
932	NM_000958.1	Homo sapiens prostaglandin E receptor 4 sapiens prostaglandin E2 receptor EP2 subtype mRNA, complete cds. > :: gb|I36298|I36298 Sequence 1 from patent US 5605814	0.39
933	Y07648	A.thaliana nit2 gene, nit1 gene and nit3 gene	0.39
934	Y13852	Drosophila diplacantha clone D3 inactive Bari-1 family transposon	0.39
935	M57851	Human S protein-alpha (PS-alpha) gene, exon 13.	0.39
936	X52270	Maize chloroplast 3'part of rpoC2 gene, rps2 gene, atpI gene and 5'part of atpH gene	0.39
937	U50948	Rattus norvegicus taste bud receptor protein TB 567 (TB 567) gene, complete cds	0.39
938	X60435	H.sapiens gene PACAP for pituitary adenylate cyclase activating polypeptide	0.39
939	U12972	Tetrahymena thermophila CU428.1VII micronuclear R region DNA.	0.39
940	X54709	Kluyveromyces lactis BiP gene for BiP/GRP78	0.39
941	Z73360	Human DNA sequence from cosmid 92M18, BRCA2 gene region chromosome 13q12-13	0.39
942	L13841	Plasmid pX01 (from Bacillus anthracis UM23-1) trans-acting positive regulator (Atx A) gene, complete cds.	0.39
943	Z72554	S.cerevisiae chromosome VII reading frame ORF YGL032c	0.39
944	L24905	Bombyx mori nuclear polyhedrosis virus hr5 gene.	0.39
945	Z11486	Pinus strobus L. mRNA for pine globulin-1	0.39
946	X70675	M.musculus gene for MERANTES protein	0.39
947	AF010537	Plasmodium falciparum microsatellite TA3 sequence	0.39
948	X78219	D.melanogaster (Barton) SED5 mRNA	0.39
949	D42055	Human mRNA for KIAA0093 gene, partial cds	0.39
950	Z30698	Rinderpest virus (RBOK) RNA for RNA polymerase (L) protein	0.39
951	M64715	Plasmodium falciparum DNA polymerase-delta gene, complete cds.	0.39
952	Z32774	H.sapiens gene for N-methyl-D-aspartate receptor R1 exons 6-21	0.39
953	U70998	Phanerochaete chrysosporium manganese peroxidase isozyme 3 (mnp3) gene, complete cds	0.39

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
954	Z72884	S.cerevisiae chromosome VII reading frame ORF YGR099w	0.39
955	S78378	Oct-4 (t12 haplotype) [mice, Genomic, 1191 nt, segment 3 of 3]	0.39
956	U78098	Pyrococcus furiosus ribonucleotide reductase (rnr) gene, complete cds	0.38
957	U78857	Rattus norvegicus protein serine/threonine kinase CPG16 (cpg16) mRNA, complete cds	0.38
958	Z54096	S.pombe chromosome I cosmid c13A11	0.38
959	Z72778	S.cerevisiae chromosome VII reading frame ORF YGL256w	0.38
960	D14718	Human chromosomal protein HMG1 related gene	0.38
961	U09138	Mus musculus peroxisome proliferator activated protein-gamma-2 mRNA, complete cds.	0.38
962	U32818	Haemophilus influenzae Rd section 133 of 163 of the complete genome	0.38
963	X89398	H.sapiens ung gene for uracil DNA-glycosylase	0.38
964	X69440	N.tabacum NTP303 gene	0.38
965	U62660	Toxoplasma gondii micronemal protein MIC2, complete cds	0.38
966	AE000042	Mycoplasma pneumoniae section 42 of 63 of the complete genome	0.38
967	V00190	Gene for small nuclear RNA D2 of slime mold (D. discoideum)	0.38
968	X98568	H.sapiens type X collagen gene	0.38
969	U54776	Human NTT gene, L1, Alu, and MER 38 repeat regions	0.38
970	Z72888	S.cerevisiae chromosome VII reading frame ORF YGR103w	0.38
971	U97128	Plasmodium falciparum HMG-like protein Pf16 (Pf16) mRNA, partial cds	0.38
972	J02846	Human tissue factor gene, complete cds.	0.38
973	J00803	Sheep corticotropin-releasing factor (CRF) mRNA, complete cds.	0.38
974	X04310	Rat thymocyte mRNA for 37K chain of CD8 antigen	0.38
975	Y13129	Rickettsia akari fmt gene, partial	0.38
976	X95099	C.albicans mRNA for neutral trehalase	0.38
977	D83948	Rat adult liver mRNA for S1-1 protein, complete cds	0.38
978	Z84722	Human DNA sequence from cosmid GG4 from a contig from the tip of the short arm of chromosome 16, spanning 2Mb of 16p13.3	0.38

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
979	U40604	Listeria monocytogenes ClpC ATPase (mec) gene, complete cds	0.38
980	Z92808	Caenorhabditis elegans cosmid M04C3, complete sequence [Caenorhabditis elegans]	0.38
981	X91882	Z.mays ZEMa gene	0.38
982	M26394	M.sexta larval cuticle protein (LCP-14) gene, exon 1.	0.38
983	U32021	Gossypium tomentosum 5S ribosomal RNA gene and non-transcribed spacer, clone 11	0.38
984	X54061	D. melanogaster mRNA coding for a 205K microtubule associated protein (MAP)	0.38
985	X14612	Chicken c-myb proto-oncogene 5'region exons 1-5	0.38
986	U12594	Sus scrofa immunoglobulin alpha heavy chain constant region (IgA C alpha) mRNA, partial cds.	0.38
987	U64841	Caenorhabditis elegans cosmid ZC142.	0.38
988	M93148	Mouse homeobox protein (Hox-1.11) gene, complete cds.	0.38
989	X14049	Canis familiaris RDC4 mRNA for G protein-coupled receptor	0.38
990	X94616	M.musculus mRNA for glycogen synthase	0.38
991	S78378	Oct-4 (t12 haplotype) [mice, Genomic, 1191 nt, segment 3 of 3]	0.38
992	D50091	Drosophila ezoana G-3-P dehydrogenase	0.37
993	Y11874	M.musculus uPA gene, promoter sequence	0.37
994	X63628	S.pombe MFm2 gene	0.37
995	Z69652	Human DNA sequence from cosmid L75B9, Huntington's Disease Region, chromosome 4p16.3	0.37
996	Y08305	L.esculentum lap17.1a gene, promoter region and CDS	0.37
997	U64453	Human ELK1 pseudogene (ELK2) and immunoglobulin heavy chain gamma pseudogene (IGHGP)	0.37
998	X82286	H.sapiens Fas, Apo-1 gene (exon IX)	0.37
999	Z48231	E.coli IncQ plasmid pIE639 sat3 gene and aphA gene	0.37
1000	L36679	Amycolatopsis methanolica plasmid pMEA300 stf gene, complete cds.	0.37
1001	X95275	P.falciparum complete gene map of plastid-like DNA	0.37
1002	Z58565	H.sapiens CpG island DNA genomic Mse1 fragment, clone 44a5, forward read cpg44a5.ft1a	0.37
1003	L14625	Arcobacter skirrowi 16S ribosomal RNA.	0.37
1004	U72236	Dictyostelium discoideum ModA (modA) gene, complete cds	0.37

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1005	X73940	B.taurus microsatellite DNA INRA190	0.37
1006	L06092	Mesocricetus auratus acidic fibroblast growth factor gene, 5' flank and non-coding exon 1.	0.37
1007	X98918	Human rotavirus gene encoding outer capsid glycoprotein VP7	0.37
1008	X14448	Human GLA gene for alpha-D-galactosidase A (EC 3.2.1.22)	0.37
1009	AF003533	Homo sapiens cytosolic phagocyte oxidase protein	0.37
1010	X67711	O.sativa hsp70 gene for heat shock protein 70	0.37
1011	Z33465	B.occidentalis gene for 18S rRNA	0.37
1012	Z12652	R.norvegicus upstream of gene for catechol methyltransferase	0.37
1013	U45934	Human papillomavirus type 68, isolate IS362, major capsid protein L1 (L1) gene, partial cds	0.37
1014	U17084	Human neurofibromin (NF1) gene, promoter region and partial cds.	0.37
1015	X95668	B.burgdorferi gidA, gidB and moxR genes	0.37
1016	X58541	Mink mRNA for plasminogen activator inhibitor type 1	0.37
1017	U48706	Dictyostelium discoideum small aggregate formation	0.37
1018	M77176	H.sapiens carbonic anhydrase II (CAII) gene, exons 1 and 2.	0.37
1019	Z72888	S.cerevisiae chromosome VII reading frame ORF YGR103w	0.37
1020	Y13234	Chironomus tentans mRNA for chitinase, 1695 bp	0.37
1021	AF004166	Lycopersicon pennellii 2-isopropylmalate synthase (lp-ipmsb) mRNA, complete cds	0.37
1022	D85240	Aspergillus niger DNA for isopullulanase precursor, complete cds	0.37
1023	Y00684	Rabbit mRNA for gamma-subunit of phosphorylase kinase (EC 2.7.1.38)	0.37
1024	X54016	D.discoideum mRNA for 24 kDa protein, homologous to C-terminal repeat sequence of rhodopsin and synaptophysin	0.37
1025	M22015	Influenza virus type C (C/JJ/50) nonstructural	0.37
1026	M62798	F.ferrugineum 16S ribosomal RNA.	0.37
1027	X76652	M.musculus mRNA for 3f8	0.37
1028	X56047	P. chrysosporium trpC gene for trifunctional polypeptide	0.37
1029	Z74896	S.cerevisiae chromosome XV reading frame ORF YOL154w	0.37
1030	U20238	Mus musculus GTPase-activating protein GAPIII mRNA, complete cds.	0.37

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1031	Z54240	L.plantarum pyrimidine biosynthetic operon genes	0.36
1032	X54742	Nicotiana plumbaginifolia beta-(1,3)-glucanase gene for a vacuolar isoform	0.36
1033	AF001415	Arabidopsis thaliana 14-3-3-like protein GF14 upsilon (GRF5) gene, complete cds	0.36
1034	X77801	S.beecheyi genomic DNA with direct repeats and integrated Hepatitis B virus	0.36
1035	Z84431	D.ligulata internal transcribed spacer 2 DNA	0.36
1036	X60753	P.sylvestris BBS gene for bibenzyl synthase	0.36
1037	D28503	Clostridium josui hemA, hemC, hemD and hemB genes of porphyrin biosynthesis	0.36
1038	X66131	R.americana mRNA for elongation factor 1-alpha	0.36
1039	X69601	B.burgdorferi p93 gene (partial)	0.36
1040	M83758	Mytilus edulis mitochondrial cytochrome oxidase subunit II (COII) gene, 3' end and NADH dehydrogenase subunit 1 (ND1) gene, 5' end.	0.36
1041	Z27392	G.raimondii (D61) copia-like reverse transcriptase fragments	0.36
1042	U28832	Infectious laryngotracheitis virus US10, US2, protein kinase, UL47, glycoprotein G, ORF5, glycoprotein D, glycoprotein I, glycoprotein E, ORF9 genes, complete cds	0.36
1043	AB002384	Human mRNA for KIAA0386 gene, complete cds	0.36
1044	M22345	Mouse endogenous provirus gag, pol, and env region DNA.	0.36
1045	U16850	Human calmodulin-I (CALM1) mRNA, 3'UTR, partial sequence	0.36
1046	M19197	Dengue virus type 2 (S1 vaccine strain), complete genome.	0.36
1047	Z49535	S.cerevisiae chromosome X reading frame ORF YJR035w	0.36
1048	Z74369	S.cerevisiae chromosome IV reading frame ORF YDR073w	0.36
1049	S78378	Oct-4 (t12 haplotype) [mice, Genomic, 1191 nt, segment 3 of 3]	0.36
1050	X60686	B.taurus mRNA for transglutaminase	0.36
1051	NM_001670.1	Homo sapiens armadillo repeat gene deleted in velo-cardio-facial syndrome (ARVCF) mRNA > :: gb|U51269|HSU51269 Human armadillo repeat protein mRNA, complete cds	0.35
1052	X63149	Y.enterocolitica ampC and ampR genes for beta-lactamase and AmpR regulatory protein	0.35
1053	L25779	Kluyveromyces lactis (HAP3) gene, complete cds,	0.35

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1054	U77368	Listeria monocytogenes internalin (inlC2), inlD, and inlE genes, complete cds	0.35
1055	M62750	Homo sapiens intergenic locus pYNZ32 variable number tandem repeat (VNTR) sequence associated with Huntington disease gene.	0.35
1056	K03073	Slime mold (D.discoideum) mRNA complementary to the right inverted terminal repeat of DIRS-1, clone pLZ12.	0.35
1057	U78025	Sus scrofa microsatellite S0399 sequence	0.35
1058	M17478	Drosophila melanogaster transformer (tra) gene, complete cds, and non-sex-specific transformer processed pseudogene mRNA.	0.35
1059	L09708	Homo sapiens complement component 2 (C2) gene allele b, exons 10 through 18 and complete cds	0.35
1060	Z16708	H. sapiens (D6S275) DNA segment containing	0.35
1061	M74201	Rabbit cytochrome P450IIC4 (CYP2C4) gene, exons 2 and 3.	0.35
1062	U63634	Mesembryanthemum crystallinum inositol methyltransferase (Imt1) gene, complete cds	0.35
1063	U73126	Oryctolagus cuniculus calcitonin receptor isoform mRNA, complete cds	0.35
1064	X52614	Maize chloroplast rps15 gene for ribosomal protein S15	0.35
1065	X52614	Maize chloroplast rps15 gene for ribosomal protein S15	0.35
1066	X57520	L.micdadei DNA for gro ELS operon	0.35
1067	D38574	Pyrodictium occultum polB gene for DNA polymerase II (family B) (alpha-like DNA polymerase), complete cds	0.35
1068	Z47075	Caenorhabditis elegans cosmid E02H1, complete sequence [Caenorhabditis elegans]	0.35
1069	Y10686	C.capreolus DNA, tandem repeat region	0.35
1070	U17771	Blaberus giganteus mitochondrion 16S ribosomal RNA, partial sequence	0.35
1071	U12186	Oryctolagus cuniculus sodium/dicarboxylate cotransporter mRNA, partial cds.	0.35
1072	L25677	Schizosaccharomyces pombe cdc42+ (Cdc42p) gene, complete cds.	0.35
1073	X63628	S.pombe MFm2 gene	0.35
1074	D67071	Rat gene for regucalcin, exon1 (non-coding exon)	0.35
1075	X93218	Impatiens necrotic spot virus L gene	0.35
1076	U16301	Human lysyl hydroxylase (PLOD) gene, intron 15, complete sequence.	0.35

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1077	M37277	Human Ig germline H-chain D-region genes, partial cds.	0.35
1078	X14448	Human GLA gene for alpha-D-galactosidase A (EC 3.2.1.22)	0.34
1079	X79930	O.gibsoni Tbb gene	0.34
1080	Z37352	H.sapiens rearranged immunoglobulin lambda light chain V-region (Vl-3)	0.34
1081	X59013	Rat mRNA for trypsin V b-form	0.34
1082	X90761	Homo sapiens hHa2 gene	0.33
1083	L23498	Bovine microsatellite repeats	0.33
1084	Z18361	O.aries trichohyalin	0.33
1085	L18785	Plasmodium falciparum DNA polymerase alpha (Pol alpha) gene	0.33
1086	X96685	B.burgdorferi cell division genes	0.33
1087	M58509	Human adrenodoxin reductase gene, exons 3 to 12.	0.33
1088	X70809	C.reptans gene for 18S ribosomal RNA	0.32
1089	D38116	Pygmy chimpanzee mitochondrial DNA, complete sequence	0.32
1090	U00310	Human immunodeficiency virus type 1 isolate 583-78 envelope glycoprotein, V3 region (env) gene, partial cds.	0.31
1091	L35670	Homo sapiens (subclone H8 10_g5 from P1 35 H5 C8) DNA sequence.	0.3
1092	M63960	Human protein phosphatase-1 catalytic subunit mRNA, complete cds.	0.3
1093	Z50747	C.psittaci DNA for kdsA, dsk1 and dsk2 genes	0.22
1094	M80215	Streptococcus pneumoniae uvs402 protein gene, complete cds.	0.22
1095	M98776	Human keratin 1 gene, complete cds	0.22
1096	X66313	H.sapiens GLUDP2 gene (exon 2)	0.21
1097	AB001025	Homo sapiens mRNA for brain ryanodine receptor, complete cds	0.21
1098	AE000956	Archaeoglobus fulgidus section 151 of 172 of the complete genome	0.21
1099	Z46268	Simian herpesvirus B DNA for glycoprotein G	0.21
1100	X99403.1	N.tabacum mRNA for defensin	0.21
1101	U20335	Drosophila pseudoobscura EP arrangement, BC p430#4 pAP5 clone alpha-amylase (amy1) gene, complete cds. > :: gb|U20337|DPU20337 Drosophila pseudoobscura HI arrangement, Mex a-176x pAP9 clone alpha-amylase (amy1) gene, complete cds.	0.21
1102	X04077	Potato patatin pseudogene (SB6B)	0.2

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1103	L11236	Rattus rattus mRNA sequence.	0.2
1104	X63547	H.sapiens mRNA for tre oncogene (clone 213) > :: gb|I76205|I76205 Sequence 9 from patent US 5691147	0.2
1105	M69051	Human liver glucokinase (ATP:D-hexose 6-phosphotransferase) mRNA, complete cds.	0.2
1106	U14950	Rattus norvegicus synapse-associated protein 97 mRNA, complete cds.	0.2
1107	NM_002583.1	Homo sapiens PRKC, apoptosis, WT1, regulator apoptosis response protein par-4 mRNA, complete cds	0.2
1108	X66313	H.sapiens GLUDP2 gene (exon 2)	0.2
1109	U48485	Human skeletal muscle ryanodine receptor gene	0.2
1110	AF018116	Dendroica pityophila cytochrome oxidase I protein, partial cds	0.2
1111	X87108	S.cerevisiae CKI3 gene	0.19
1112	M55249	E.coli retron Ec67 DNA encoding reverse transcriptase and Dam methylase functions.	0.19
1113	L06898	Actinomyces viscosus sialidase (nanH) gene, complete cds.	0.19
1114	Y13631	Clostridium botulinum P-21, P-47 ntnh, bonT genes	0.18
1115	L24904	Bombyx mori nuclear polyhedrosis virus hr4R gene.	0.18
1116	M85049	Drosophila melanogaster brahma protein mRNA, complete cds.	0.18
1117	X60777	Shigella dysenteriae ipaBCD genes	0.17
1118	L42936	Pseudoxycheila bipustulata mitochondrial large subunit 16S ribosomal RNA (16S rRNA) gene	0.17
1119	AE001359	Chlamydia trachomatis section 86 of 87 of the complete genome	0.17
1120	K00899	yeast(s.cerevisiae) histone 3 gene (h3) fused with e.coli lacz gene and promoter, clone prm115.	0.17
1121	M83994	Staphylococcus aureus prolipoprotein signal peptidase (lsp) gene, complete cds.	0.17
1122	Z28050	S.cerevisiae chromosome XI reading frame ORF YKL050c	0.16
1123	L23971	Mus musculus fragile X mental retardation syndrome protein (Fmr1) (homologue) mRNA, complete cds.	0.16
1124	Z98560	S.pombe chromosome I cosmid c4C5	0.15
1125	U89258	Oxytricha fallax 'D,D35E' type transposase gene, partial cds	0.15
1126	X62522	R.norvegicus gene for CNS-myelin proteolipid protein (exon 1)	0.15

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1127	X74504	M.musculus T10 mRNA	0.15
1128	D50931	Human mRNA for KIAA0141 gene, complete cds	0.15
1129	Z48951	S.cerevisiae chromosome XVI cosmid 9723	0.15
1130	L12395	Brassica napus small GTP-binding protein (bra) mRNA, complete cds.	0.15
1131	U39367	Blepharoneura manchesteri 16S ribosomal RNA gene, mitochondrial gene encoding mitochondrial RNA, partial sequence	0.15
1132	D50357	Leptocarabus procerulus mitochondrial DNA for NADH dehydrogenase subunit 5, partial cds	0.15
1133	L35272	Glycine max heat shock protein (SB100) mRNA, complete cds.	0.15
1134	U63641	Legionella pneumophila rpoD operon LporfX, LpdnaG, and LprpoD genes, complete cds	0.15
1135	X72186	H.sapiens C6 gene, exons 10, 11 and 12	0.15
1136	D45893	Neurospora crassa acr-2 DNA, complete cds	0.15
1137	L47106	Neurospora crassa kinesin (NKIN) mRNA, complete cds	0.15
1138	L04457	Phytophthora megasperma mitochondrial ORF152, complete cds, cytochrome c oxidase subunit I (cox1) gene, complete cds, cytochrome c oxidase subunit II	0.15
1139	L04457	Phytophthora megasperma mitochondrial ORF152, complete cds, cytochrome c oxidase subunit I (cox1) gene, complete cds, cytochrome c oxidase subunit II	0.15
1140	U12539	Schizosaccharomyces pombe scd2 (scd2) gene, complete cds.	0.15
1141	U12539	Schizosaccharomyces pombe scd2 (scd2) gene, complete cds.	0.15
1142	AB001901	Homo sapiens PACE4 gene, exon 4-7	0.15
1143	M97550	Maize sucrose phosphate synthase mRNA, complete cds. > :: emb|A17878.1|A17878 Synthetic SPS sequence >	0.15
1144	AB001901	Homo sapiens PACE4 gene, exon 4-7	0.15
1145	X07438	Human DNA for cellular retinol binding protein	0.14
1146	Z57339	H.sapiens CpG island DNA genomic Mse1 fragment, clone 171g3, reverse read cpg171g3.rt1a	0.14
1147	X05034	Rat C2A gene for prostatic binding protein (PBP)	0.14
1148	U55712	Human ataxia-telangiectasia (ATM) gene, exon 12	0.14
1149	M20273	Human hepatitis virus type A RNA, complete genome.	0.14
1150	J01764	Plasmid pT181, complete genome.	0.14
1151	X61109	G.gorilla beta-globin gene	0.14

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1152	Z30587	S.hominis (972) genes for potential ABC transporter and potential membrane spanning protein	0.14
1153	U60400	Babanki virus polymerase nsP4 gene, partial cds virus polymerase nsP4 gene, partial cds	0.14
1154	U67478	Methanococcus jannaschii section 20 of 150 of the complete genome	0.14
1155	Z71641	S.cerevisiae chromosome XIV reading frame ORF YNR026c	0.14
1156	X53522	M.musculus VL1 gene (1G-5)	0.14
1157	Z21753	O.tanganicae mitochondrion genes for tRNA-Thr	0.14
1158	L33841	Carthamus tinctorius glycerol-3-phosphate acyltransferase mRNA, complete cds.	0.14
1159	AF003277	Glossiphonia complanata cytochrome c oxidase subunit I (COI) gene, partial cds	0.14
1160	U89035	Oxytricha fallax transposon TBE1, insertion fal6, 42 kDa transposase gene, partial cds	0.14
1161	L36923	Streptococcus pneumoniae beta-N-acetylhexosaminidase (strH) gene, complete cds	0.14
1162	U64830	Dictyostelium discoideum AX2 protein tyrosine kinase gene, complete cds.	0.14
1163	U43082	Zea mays T cytoplasm male sterility restorer factor 2 (rf2) mRNA, complete cds	0.14
1164	Z26492	T.repens TrMT1A mRNA for metallothionein-like protein	0.14
1165	X83683	V.sativa mRNA for early nodulin 40	0.14
1166	D63861	Homo sapiens DNA for cyclophilin 40, complete cds	0.14
1167	D86594	Japanese jack bean clone CgHMGY1 DNA for high mobility group protein, complete cds	0.14
1168	Z18859	H.sapiens gene for cone transducin alpha subunit	0.14
1169	L28038	Trypanosoma rangeli kinetoplast DNA sequence with conserved sequence blocks	0.14
1170	U72057	Mus musculus chloride channel regulator (Icln) gene, exon 1	0.14
1171	AF003836	Mesocricetus auratus isopentenyl diphosphate:dimethylallyl diphosphate isomerase mRNA, complete cds	0.14
1172	X78422	A.thaliana HYP1 mRNA	0.14
1173	U28042	Human DEAD box RNA helicase-like protein mRNA, complete cds	0.14
1174	U01070	Mycoplasma flocculare Ms42 5S rRNA gene.	0.14
1175	U54776	Human NTT gene, L1, Alu, and MER 38 repeat regions	0.14

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SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1176	U40375	Mus musculus Supt6h mRNA, complete cds	0.14
1177	X71083	G.max gene for coproporphyrinogen oxidase	0.14
1178	D86253	Human MHC (HLA) DRB intron 1 DNA, partial sequence	0.14
1179	M55002	Synechococcus sp. 6-phosphogluconate dehydrogenase gene, complete cds.	0.14
1180	X14036	Tomato cab-7 gene for type II chlorophyll a/b-binding protein	0.14
1181	L35272	Glycine max heat shock protein (SB100) mRNA, complete cds.	0.14
1182	D50931	Human mRNA for KIAA0141 gene, complete cds	0.14
1183	L35272	Glycine max heat shock protein (SB100) mRNA, complete cds.	0.14
1184	X05034	Rat C2A gene for prostatic binding protein (PBP)	0.14
1185	X89553	Echovirus 26 DNA for VP2 capsid protein gene	0.14
1186	Z77656	Caenorhabditis elegans cosmid F07B10, complete sequence [Caenorhabditis elegans]	0.14
1187	Z84739	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA28G5	0.14
1188	L34219	Homo sapiens retinaldehyde-binding protein (CRALBP) gene, complete cds.	0.14
1189	M30168	D.melanogaster nested repetitive sequences F and G, segment 3 of 6.	0.14
1190	U07260	Perissodus microlepis T32a mitochondrion NADH dehydrogenase subunit 2 gene, complete cds	0.14
1191	X15308	H.sapiens NF-H gene, exon 3	0.14
1192	J02763	Human calcyclin gene, complete cds.	0.14
1193	M76175	Mouse elongation factor 2 pseudogene, complete cds.	0.14
1194	X67735	M.musculus mas gene for Mas proto-oncogene	0.14
1195	NM_002816.1	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 12 (PSMD12) mRNA > :: dbj|AB003103|AB003103 Homo sapiens mRNA for 26S proteasome subunit p55, complete cds	0.14
1196	U20754	Felis catus chromosome D2 mtDNA tandem repeat Numt	0.14
1197	L00727	Human myotonin protein kinase (Mt-PK) gene, complete cds. > :: gb|I25678|I25678 Sequence 10 from patent US 5552282	0.14
1198	M57750	S.pombe cut2+ gene, complete cds.	0.14
1199	X03000	Adenovirus type 7 genome left end (0.0 to 31 %)	0.14

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1200	NM_002911.1	Homo sapiens regulator of nonsense transcripts 1 (RENT1) mRNA > :: gb|U65533|HSU65533 Human regulator of nonsense transcript stability (RENT1) mRNA, complete cds	0.14
1201	Z71367	S.cerevisiae chromosome XIV reading frame ORF YNL091w	0.14
1202	J04809	Human cytosolic adenylate kinase (AK1) gene, complete cds.	0.14
1203	X75014	M.musculus Phox2 mRNA for homeodomain protein	0.14
1204	Y12259	R.norvegicus mRNA for Kir3.1 protein	0.14
1205	X81981	L.helveticus plasmid pLH2 DNA (4 ORFs)	0.14
1206	AB001901	Homo sapiens PACE4 gene, exon 4-7	0.14
1207	D38548	Human mRNA for KIAA0076 gene, complete cds	0.14
1208	X64273	Herpesvirus saimiri gene 15 > :: gb|I41338|I41338 Sequence 9 from patent US 5624837 > :: gb|I49086|I49086 Sequence 9 from patent US 5627264	0.13
1209	Z92779	Caenorhabditis elegans cosmid C44E1, complete sequence [Caenorhabditis elegans]	0.13
1210	X14384	Astasia longa chloroplast rpl5 gene for ribosomal protein L5	0.13
1211	M97880	Bacillus thuringiensis cryIC-related gene sequence. > :: gb|I82521|I82521 Sequence 1 from patent US 5712248 > :: gb|I93759|I93759 Sequence 1 from patent US 5731194	0.13
1212	X58049	H.sapiens DNA for ferredoxin repeat region	0.13
1213	U47542	Vibrio cholerae ADP-L-glycero-D-mannoheptose-6-epimerase (rfaD) gene, complete cds.	0.13
1214	M90758	Sheep (clone C5-2) MHC class II cell surface glycoprotein OLA-DRB (OLA-DRB) pseudogene, exon 4. > :: gb|S83918|S83914S3 DRB=MHC class II B {pseudogene}	0.13
1215	U67478	Methanococcus jannaschii section 20 of 150 of the complete genome	0.13
1216	U90889	Mus musculus transketolase (TKT) gene, partial cds	0.13
1217	K03273	C.elegans heat shock protein genes (hsp16-48 and hsp16-1), complete cds.	0.13
1218	D90736	Escherichia coli genomic DNA. (22.6 - 23.0 min)	0.13
1219	X63546	H.sapiens mRNA for tre oncogene (clone 210)	0.13

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1220	L16770	Anas platyrhynchos mitochondrial complete transfer RNA-Glu, transfer RNA-Phe, transfer RNA-Val, transfer RNA-Leu, 12S ribosomal RNA, and 16S ribosomal RNA genes	0.13
1221	U94410	Dictyostelium discoideum plasmid Ddp6 Rep protein	0.13
1222	AC001083	Homo sapiens (subclone 2_a6 from BAC H75) DNA sequence	0.13
1223	Z96048	Caenorhabditis elegans cosmid F57A10, complete sequence [Caenorhabditis elegans]	0.13
1224	M92914	Drosophila virilis mastermind gene, complete cds	0.13
1225	Z82961	Bacterial sp. partial 16S rRNA gene (clone group T4A)	0.13
1226	U66535	Human beta4-integrin (ITGB4) gene, exons 19,20,21,22,23,24 and 25	0.13
1227	NM_001432.1	Homo sapiens epiregulin (EREG) mRNA > :: dbj|D30783|D30783 Homo sapiens mRNA for epiregulin, complete cds	0.13
1228	X96468	P.tetraurelia gamma1-51D immobilisation antigen gene, 3' coding and non-coding region	0.13
1229	X05918	Kluyveromyces fragilis beta-glucosidase gene	0.13
1230	Z48243	A.thaliana PARP mRNA for PARP protein	0.13
1231	X56276	Human Hut 2 End gene	0.13
1232	X55318	Mus musculus Hox-3.2 gene	0.13
1233	U90009	Phalacrocorax pelagicus cytochrome b gene, mitochondrial gene encoding mitochondrial protein, partial cds	0.13
1234	L76571	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds	0.13
1235	U60581	Human c-jun gene, promoter region with flanking evolutionary conserved sequences	0.13
1236	Z26886	B.mori gene for Nd-sD mutant fibroin light chain	0.13
1237	L19740	Canis familiaris Kv1.2 delayed rectifier K+ channel mRNA, complete cds	0.13
1238	U26948	Glycine max ribosomal protein S16 (rps16) gene, partial cds, beta-carboxyltransferase (accD), photosystem I component (psaI), ORF 202 protein (ORF 203), ORF 151 protein (ORF 151), ORF 103 protein (ORF 103), ORF 229 precurso...	0.13
1239	U48288	Rattus norvegicus A-kinase anchoring protein AKAP 220 mRNA, complete cds	0.13
1240	X70064	P.deltoides gene for poplar bark storage protein	0.13
1241	L22857	Colletotrichum gloeosporioides pectin lyase (pnlA) gene, exons 1-7.	0.13

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1242	X75607	P.halophilus RepA and RepB genes	0.13
1243	X82584	M.musculus mRNA for immunoglobulin heavy chain, V region (pe15)	0.13
1244	M76713	Spodoptera frugiperda 16S rRNA gene, Val-tRNA, and Leu-tRNA genes, and ND-1 protein gene, 5' end.	0.13
1245	X57075	H.sapiens FGF6 gene	0.13
1246	Z17201	H. sapiens (DXS1003) DNA segment containing	0.13
1247	D50931	Human mRNA for KIAA0141 gene, complete cds	0.13
1248	D80002	Human mRNA for KIAA0180 gene, partial cds	0.13
1249	M58600	Human heparin cofactor II (HCF2) gene, exons 1 through 5.	0.13
1250	Z79998	Human DNA sequence from cosmid B5E3 on chromosome 22 Contains CpG island, EST	0.13
1251	X82868	G.gallus microsatellite DNA (63G2)	0.13
1252	AF009074	Hepatitis C virus genomic RNA, 3' nonstranslated region, partial sequence. clone #19	0.13
1253	M26716	Rat cAMP phosphodiesterase mRNA, complete cds., clone RD3.	0.13
1254	Z57339	H.sapiens CpG island DNA genomic Mse1 fragment, clone 171g3, reverse read cpg171g3.rt1a	0.13
1255	U76524	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	0.13
1256	AF000582	Mus musculus nuclear receptor coactivator protein 2 mRNA, complete cds	0.13
1257	D12917	Yeast gene for a component of the pheromone signal transduction pathway, complete cds	0.13
1258	X70326	H.sapiens MacMarcks mRNA	0.13
1259	X82237	S.chinensis RAPD DNA (523 bp)	0.13
1260	U10116	Human superoxide dismutase (SOD3) gene, complete cds.	0.13
1261	X73293	M.vannielii genes rpoH, rpoB and rpoA	0.13
1262	U01766	Mycoplasma genitalium major adhesion protein MgPa gene, partial cds	0.13
1263	X79706	C.aletinum capr1 mRNA for pathogenesis-related protein	0.13
1264	U45957	Nicotiana alata SA2-RNase precursor gene, complete cds.	0.13
1265	X66313	H.sapiens GLUDP2 gene (exon 2)	0.13
1266	X07946	Yeast plasmid DNA coding for RNA polymerase subunit	0.13
1267	X07870	Drosophila melanogaster bicoid gene bcd	0.13
1268	X15308	H.sapiens NF-H gene, exon 3	0.13
1269	Z22551	H.sapiens kinectin gene	0.13

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1270	X89398	H.sapiens ung gene for uracil DNA-glycosylase	0.13
1271	D10654	S.coelicolor afsQ1 and afsQ2 genes	0.13
1272	U10516	Human DNA polymerase beta gene, exons 1 and 2	0.13
1273	X57075	H.sapiens FGF6 gene	0.13
1274	U71193	Mus musculus Rpl23 matrix-attachment region	0.13
1275	X69908	H.sapiens gene for mitochondrial ATP synthase c subunit (P2 form)	0.13
1276	M81322	Macaca fascicularis proline-rich protein (MnP4) gene, complete cds.	0.13
1277	X78401	Bacteriophage P22 right operon, orf 48, replication genes 18 and 12, nin region genes, ninG phosphatase, late control gene 23, orf 60, complete cds, late control region, start of lysis gene 13	0.13
1278	X78401	Bacteriophage P22 right operon, orf 48, replication genes 18 and 12, nin region genes, ninG phosphatase, late control gene 23, orf 60, complete cds, late control region, start of lysis gene 13	0.13
1279	Y09852	H.sapiens FGFR3 gene, partial	0.13
1280	Z71367	S.cerevisiae chromosome XIV reading frame ORF YNL091w	0.13
1281	U38292	Human microtubule-associated protein 1a (MAP1A) mRNA, complete cds	0.13
1282	Z71367	S.cerevisiae chromosome XIV reading frame ORF YNL091w	0.13
1283	Z71367	S.cerevisiae chromosome XIV reading frame ORF YNL091w	0.13
1284	M87623	Babesia bovis variable antigen 1 mRNA, 5' end.	0.13
1285	M91452	Sus scrofa ryanodine receptor (RYR1) gene, complete cds.	0.13
1286	M91452	Sus scrofa ryanodine receptor (RYR1) gene, complete cds.	0.13
1287	M87623	Babesia bovis variable antigen 1 mRNA, 5' end.	0.13
1288	X96616	P.primaurelia gene encoding 156D surface antigen	0.13
1289	Z33222	M.capricolum DNA for CONTIG MC303	0.12
1290	X52626	Phaseolus vulgaris gene for alpha-phaseolin	0.12
1291	L32699	Paracentrctus lividus glutamine synthetase (GS) mRNA, complete cds	0.12
1292	M63669	Dog arginine esterase gene, complete cds.	0.12
1293	X75653	A.longa plastid genes for ribosomal proteins and tRNAs	0.12
1294	Z11839	T.maritima nusG gene and genes for ribosomal proteins	0.12

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1295	AB005744	Perilla frutescens DNA for 1-limonene synthase, complete cds	0.12
1296	X84904	Plasmodium falciparum encoding Pfg27/25	0.12
1297	L02074	Drosophila melanogaster ribosomal protein S6 gene and two potential alternatively spliced proteins, complete cds	0.12
1298	Z84812	Human DNA sequence from phage pTEL from a contig from the tip of the short arm of chromosome 16, spanning 2Mb of 16p13.3 Contains ESTs	0.12
1299	X95276	P.falciparum complete gene map of plastid-like DNA	0.12
1300	NM_001432.1	Homo sapiens epiregulin (EREG) mRNA > :: *dbj|D30783|D30783* Homo sapiens mRNA for epiregulin, complete cds	0.12
1301	X84726	M.musculus neurocan gene	0.12
1302	Z35810	S.cerevisiae chromosome II reading frame ORF YBL049w	0.12
1303	L01655	Plasmodium falciparum T9/106 triosephosphate isomerase (tpi) gene.	0.12
1304	U36796	Mus musculus presynaptic protein SNAP-25 (Snap-25) gene, 5' region	0.12
1305	U22361	Saccharomyces cerevisiae Rlr1p (RLR1) gene, complete cds.	0.12
1306	L04161	Plasmodium falciparum (clone Pfg377 [PfsXLX]) DNA sequence, complete cds	0.12
1307	U32768	Haemophilus influenzae Rd section 83 of 163 of the complete genome	0.12
1308	D28808	Mycoplasma capricolum mtlA and gyrB genes for DNA gyrase subunit B and mannitol-specific phosphotransferase enzymeII	0.12
1309	L05920	Human constitutively expressed serum amyloid A protein (SAA4) gene, exons 1 through 4.	0.12
1310	M96642	Paramecium tetraurelia P126 repetitive element.	0.12
1311	L81724	Homo sapiens (subclone 2_a3 from P1 H69) DNA sequence	0.12
1312	AF010331	Tenebrio molitor thermal hysteresis protein isoform YL 3 precursor, mRNA, complete cds	0.12
1313	U74496	Human chromosome 4q35 subtelomeric sequence	0.12
1314	U17295	Haemophilus influenzae dppB, dppC, dppD, dppF, isn, artP, artI/J, artQ, and artM genes, complete cds, and opa gene, partial cds.	0.12
1315	X53921	A. thaliana T-DNA insertion genomic target sequence 621-36	0.12

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1316	X75653	A.longa plastid genes for ribosomal proteins and tRNAs	0.12
1317	U09347	Human variant urokinase plasminogen activator receptor (uPAR2) mRNA, partial cds.	0.12
1318	S83182	hyaluronan-binding protein=hepatocyte growth factor activator homolog [human, plasma, mRNA, 2408 nt]	0.12
1319	U21164	Human dopamine D5 receptor gene, 5' flanking and promoter region	0.12
1320	AF022391	Feline herpesvirus 1 immediate early protein, glycoprotein gL, and uracil DNA glycosylase genes, complete cds	0.12
1321	M74569	Clostridium acetobutylicum heat shock protein	0.12
1322	X15359	*Drosophila virilis* hunchback (hb) gene for zinc-finger protein transcription factor	0.12
1323	U67478	Methanococcus jannaschii section 20 of 150 of the complete genome	0.12
1324	X77052	Entomopoxvirus gene for spherulin	0.12
1325	M97514	Saccharomyces douglasii mitochondrial cytochrome c oxidase subunit I (COXI) gene, complete cds	0.12
1326	X56495	H.sapiens DNA for the upstream regulatory region of the c-erbB2 gene	0.12
1327	D61398	Human MSH3 gene, exon3	0.12
1328	Z81595	Caenorhabditis elegans cosmid T22H2, complete sequence [Caenorhabditis elegans]	0.12
1329	D61398	Human MSH3 gene, exon3	0.12
1330	Z79998	Human DNA sequence from cosmid B5E3 on chromosome 22 Contains CpG island, EST	0.12
1331	NM_001280.1	Homo sapiens cold inducible RNA-binding protein (CIRBP) mRNA > :: dbj|D78134|HUMCIRPA Homo sapiens mRNA for CIRP, complete cds	0.12
1332	Z49867	Caenorhabditis elegans cosmid C33D3, complete sequence [Caenorhabditis elegans]	0.12
1333	X14036	Tomato cab-7 gene for type II chlorophyll a/b-binding protein	0.12
1334	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	0.12
1335	U19159	Human P protein (P) gene, exon 8	0.12
1336	X74987	H.sapiens mRNA for 2'-5' oligoadenylate binding protein > :: gb|L24115|HUMAAZ Human DNA fragment. > :: emb|A49723.1|A49723 Sequence 2 from Patent WO9610636	0.12

Table 2A Nearest Neighbor (BlastN vs GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1337	U32112	Dictyostelium discoideum 34 kDa actin binding protein gene, complete cds > :: emb|Z50156|DD30KDABP D.discoideum gene for 34 kD actin binding protein	0.12
1338	M55002	Synechococcus sp. 6-phosphogluconate dehydrogenase gene, complete cds.	0.12
1339	AF019225	Homo sapiens apolipoprotein L mRNA, complete cds	0.12
1340	U14190	Mycobacterium smegmatis diptheria toxin repressor homolog (dtxR) gene, complete cds.	0.12
1341	J05276	Rat 5-hydroxytryptamine-1a receptor (5-HT-1a) gene, complete cds.	0.12
1342	AE000603.1	Helicobacter pylori 26695 section 81 of 134 of the complete genome	0.12
1343	X15308	H.sapiens NF-H gene, exon 3	0.12
1344	L35600	Homo sapiens DNA sequence.	0.12
1345	Z73360	Human DNA sequence from cosmid 92M18, BRCA2 gene region chromosome 13q12-13	0.12
1346	U93721	Homo sapiens green cone photoreceptor pigment gene, 5' flanking region	0.12
1347	X78401	Bacteriophage P22 right operon, orf 48, replication genes 18 and 12, nin region genes, ninG phosphatase, late control gene 23, orf 60, complete cds, late control region, start of lysis gene 13	0.12
1348	Z71367	S.cerevisiae chromosome XIV reading frame ORF YNL091w	0.12
1349	U43673	Mus musculus putative transmembrane receptor IL-1Rrp mRNA, complete cds > :: gb|AR016448|AR016448 Sequence 3 from patent US 5776731	0.12
1350	X72863	A.thaliana TMKL1 mRNA	0.12
1351	U13769	Vibrio sp. ppGpp synthetase I (relA) gene, complete cds.	0.12
1352	M32732	Chicken progesterone receptor gene, encoding forms A and B, exon 8.	0.11
1353	X04668	Xenopus laevis XK81A1 keratin gene > :: emb|X04804|XLXK81A1 Xenopus laevis DNA for stage-specific epidermal type I keratin A1 (embryo- and larval-specific)	0.11
1354	Z82197	Human DNA sequence from PAC 293L6 on chromosome 22, complete sequence [Homo sapiens]	0.11

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1355	M84214	Cucumis sativus ORF 1, chitinase, and ORF 3 genes, complete cds > :: gb|I38466|I38466 Sequence 36 from patent US 5614395 > :: gb|I56941|I56941 Sequence 36 from patent US 5650505 > :: gb|I59807|I59807 Sequence 36 from patent US 5654414 > :: gb|I75134|I7513	0.11
1356	Y08503	F.domesticus mitochondrial 12S rRNA gene	0.11
1357	L03286	Hamster P-glycoprotein class I (pgp1) gene exons 1-2.	0.11
1358	X57171	D.caryophyllus CARSR12 gene	0.11
1359	L07307	Mus musculus ATPase mRNA-ampifying genomic DNA MOR6.5 sequence. > :: gb|S55685|S55685 MOR6.5=ouabain resistance gene {repeat sequence} [mice, Genomic, 6395 nt]	0.11
1360	Z22175	Caenorhabditis elegans cosmid K01F9, complete sequence [Caenorhabditis elegans]	0.1
1361	Z11839	T.maritima nusG gene and genes for ribosomal proteins	0.1
1362	L36857	Pisum sativum GTP-binding protein (IAP86) mRNA, complete cds.	0.096
1363	AF000994	Homo sapiens ubiquitous TPR motif, Y isoform	0.07
1364	U61950	Caenorhabditis elegans cosmid C45E5	0.069
1365	U32446	Mus musculus putative breast/ovarian cancer susceptibility protein homolog (Brca1) mRNA, complete cds.	0.068
1366	AB001914	Homo sapiens PACE4 gene, exon 23-25, complete cds	0.068
1367	L20934	Anopheles gambiae complete mitochondrial genome	0.066
1368	AJ001700	Mus musculus mRNA for neuroserpin	0.065
1369	AJ001700	Mus musculus mRNA for neuroserpin	0.065
1370	AF106932	Drosophila melanogaster plexin A (plexA) mRNA, complete cds	0.065
1371	D82813	Populus kitakamiensis cyp73b gene for cinnamic acid 4 hydroxylase, partial cds	0.065
1372	V01087	Hemagglutinin gene of influenza virus strain A/duck/Ukraine/1/63	0.065
1373	AE001178	Borrelia burgdorferi (section 64 of 70) of the complete genome	0.064
1374	X80199	H.sapiens MLN51 mRNA	0.064
1375	AF042384	Homo sapiens BC-2 protein mRNA, complete cds	0.064
1376	AJ223485	Enoploteuthis higginsi mitochondrial 16S rRNA	0.063
1377	AF086094	Homo sapiens full length insert cDNA clone YZ87H06	0.061

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1378	AF017027	African swine fever virus lectin homolog (8CR) gene, complete cds	0.061
1379	U56084	Bordetella bronchiseptica electron transfer flavoprotein alpha subunit (etfA) gene, partial cds, and exogenous ferric siderophore receptor (bfrA) gene, complete cds	0.06
1380	M33387	Human debrisoquine 4-hydroxylase (CYP2D8P) and	0.057
1381	M25315	Homo sapiens (clone pAT 464) potential lymphokine/cytokine mRNA, complete cds.	0.057
1382	AB011121	Homo sapiens mRNA for KIAA0549 protein, partial cds	0.055
1383	NM_002647.1	Homo sapiens phosphatidylinositol 3-kinase, class 3 (PIK3C3) mRNA > :: emb|Z46973|HSPITR1 H.sapiens mRNA for phosphatidylinositol 3-kinase	0.051
1384	Z18274	Homo sapiens satellite DNA	0.05
1385	L25941	Homo sapiens integral nuclear envelope inner membrane protein (LBR) gene, complete cds.	0.049
1386	U28171	Trypanosoma cruzi kinetoplast putative maxicircle divergent region.	0.049
1387	X76168	R.norvegicus mRNA for connexin 30.3	0.049
1388	L34345	Morganella morganii xylitol repressor, complete cds; xylitol dehydrogenase, complete cds; xylulokinase, 5' end.	0.049
1389	K01322	Human Ig germline kappa L-chain V-region gene germline kappa L-chain V-region gene (HK189), V-kappa-1.	0.049
1390	S72468	capsid protein {RNA 3} [tomato aspermy virus TAV-B, Blencowe, Genomic RNA, 2213 nt]	0.049
1391	L08426	Zea mays auxin-binding protein (abp4) gene, exons 1-5 and complete cds.	0.048
1392	X96972	D.buzzatii copia element DNA	0.048
1393	X17147	Canine mRNA for thyrotropin (TSH) receptor variant	0.048
1394	L13164	Saccharomyces cerevisiae k9 killer toxin resistant	0.047
1395	X66451	E.octocarinatus RPA2 gene for RNA polymerase I second largest subunit	0.047
1396	X75426	G.biloba (developing endosperm) ginnacin mRNA	0.047
1397	M95171	Aedes aegypti LINE retrotransposon Juan-A including DNA binding protein and reverse transcriptase-like protein mRNA, complete coding regions.	0.047
1398	Z49076	R.prowazekii gene (unknown)	0.047

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1399	K01323	Human Ig germline kappa L-chain V-region gene germline immunoglobulin heavy chain, kappa chain,	0.047
1400	L48713	Homo sapiens galactose-1-phosphate uridyl transferase (GALT) mutant V44L gene, exon 7 (M96246 bases 303-924).	0.047
1401	U77310	Drosophila melanogaster porcupine mRNA, complete cds	0.047
1402	J01323	Yeast (S. cerevisiae) enolase gene (clone peno8) and flanks.	0.047
1403	L14321	Bovine herpesvirus type 1 immedidate-early transcriptional control protein (BICP4) gene, 5' end.	0.047
1404	L19266	Homo sapiens myotonic dystrophy-associated protein kinase and 59 genes.	0.047
1405	M58600	Human heparin cofactor II (HCF2) gene, exons 1 through 5.	0.046
1406	D86964	Human mRNA for KIAA0209 gene, partial cds	0.046
1407	Z83329	S.salar mRNA for transport associated protein Tap2B	0.046
1408	L27331	Glyphinaphis bambusae mitochondrial cytochrome oxidase subunit I gene, 3' end, and cytochrome oxidase subunit II gene, 5' end.	0.046
1409	U57613	Human interleukin-2 receptor alpha chain (IL2RA) gene, promoter region	0.046
1410	U24088	Solanum tuberosum sucrose synthase gene, clone gPOSS65, complete cds.	0.046
1411	V01087	Hemagglutinin gene of influenza virus strain A/duck/Ukraine/1/63	0.046
1412	S76792	OX40=cell surface antigen [human, mRNA Partial, 1034 nt]	0.046
1413	U72396	Lycopersicon esculentum class II small heat shock protein Le-HSP17.6 mRNA, complete cds	0.046
1414	U51677	Human non-histone chromatin protein HMG1 (HMG1) gene, complete cds	0.046
1415	X98743	H.sapiens mRNA for RNA helicase (Myc-regulated dead box protein)	0.046
1416	M63868	C.hircus alpha-lactalbumin gene, exons 1-4.	0.046
1417	Z92970	Caenorhabditis elegans cosmid H06O01, complete sequence [Caenorhabditis elegans]	0.045
1418	M29482	Human leukocyte adhesion protein p150,95 alpha subunit gene, exons 2 - 6.	0.045
1419	Z78942	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA19G4	0.045

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1420	L06863	Cricetulus griseus type VII collagen mRNA, 3' end.	0.045
1421	X86449	E.caballus DNA segment containing microsatellite	0.045
1422	U32446	Mus musculus putative breast/ovarian cancer susceptibility protein homolog (Brca1) mRNA, complete cds.	0.045
1423	K01323	Human Ig germline kappa L-chain V-region gene germline immunoglobulin heavy chain, kappa chain,	0.045
1424	M13555	Human Ia-associated invariant gamma-chain gene, exon 1, clones lambda-y(1,2,3).	0.045
1425	U68562	Rattus norvegicus chaperonin 60 (Hsp60) and chaperonin 10 (CPN10) genes, nuclear genes encoding mitochondrial proteins, complete cds	0.045
1426	AB003286	Homo sapiens DNA for choline kinase like protein and muscle type carnitine palmitoyltransferase I, partial and complete cds	0.045
1427	U34372	Human tyrosine kinase TXK (txk) gene, exon 6.	0.045
1428	U51677	Human non-histone chromatin protein HMG1 (HMG1) gene, complete cds	0.045
1429	U23476	Dictyostelium discoideum phosphatidylinositol-4,5-diphosphate 3-kinase (PIK1) mRNA, complete cds.	0.045
1430	Z98975	S.pombe chromosome I cosmid c19E9	0.044
1431	X16465	Trypanosoma brucei mRNA for cysteine proteinase	0.044
1432	D85274	Macaca fascicularis mitochondrial DNA for NADH dehydrogenase subunit 4, subunit 5, partial cds	0.044
1433	X16876	Soybean ENOD2B gene for Ngm-75	0.044
1434	U19755	Mus domesticus thyroid transcription factor 1 gene, complete cds.	0.044
1435	L77700	Gallus gallus 18C15 mRNA, complete cds.	0.044
1436	AF019981	Dictyostelium discoideum HelE (helE) gene, partial cds	0.044
1437	L13469	Saccharomyces cerevisiae antiviral protein Ski2p	0.044
1438	M26238	D.discoideum spore coat protein SP70 gene, complete cds.	0.044
1439	U65391	Lycopersicon esculentum PRF (Prf) gene, complete cds	0.044
1440	AF000582	Mus musculus nuclear receptor coactivator protein 2 mRNA, complete cds	0.044
1441	X98880	C.albicans ARG5,6 gene	0.044
1442	D89609	Oryzias latipes mRNA for choriogenin H, complete cds	0.044

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1443	Y13544	Homo sapiens cosmid C1	0.044
1444	Y14952	Mus musculus gene encoding immunoglobulin J chain precursor	0.043
1445	Z69660	Caenorhabditis elegans cosmid F39B1, complete sequence [Caenorhabditis elegans]	0.043
1446	X53404	Glycine max glycinin A(1a)B(1b) and A(2)B(1a) boundary DNA	0.043
1447	U48271	Dictyostelium discoideum UbpA deubiquitinase mRNA, complete cds	0.043
1448	U24187	Saccharomyces cerevisiae origin recognition complex, subunit 5 (ORC5) gene, complete cds > :: gb|I32734|I32734 Sequence 9 from patent US 5589341 > :: gb|I38710|I38710 Sequence 9 from patent US 5614618	0.043
1449	Z28177	S.cerevisiae chromosome XI reading frame ORF YKL178c	0.043
1450	X05951	Drosophila melanogaster calmodulin gene exon 4 and intron III (partial)	0.043
1451	L12999	Daltonia sp. mitochondrial 16S ribosomal RNA	0.043
1452	U68098	Human poly(A)-binding protein (PABP) gene, exons 6 and 7	0.043
1453	U55774	Caenorhabditis elegans cosmid F35G8.	0.043
1454	Z46941	H.sapiens DNA for alu repeats	0.043
1455	U41747	Caenorhabditis elegans cosmid ZK1131.	0.043
1456	M30168	D.melanogaster nested repetitive sequences F and G, segment 3 of 6.	0.043
1457	U05350	Human immunodeficiency virus type 2 isolate HIV2CBL21 gp160 envelope (env) gene, complete cds.	0.042
1458	U44129	Rattus norvegicus p58 mRNA, complete cds	0.042
1459	L13377	Staphylococcus aureus enterotoxin gene, 3' end.	0.042
1460	X83758	P.falciparum topoisomerase I gene	0.042
1461	U64896	Anagrapha falcifera nuclear polyhedrosis virus protein-typrosine phosphatase, lef-2, polyhedrin, vp78 and protein kinase genes, complete cds	0.042
1462	J02175	Influenza A/wsn/33 (h1n1), defective interfering l3, cdna.	0.042
1463	D86608	Arabidopsis thaliana DNA for inorganic phosphate transporter, complete cds	0.042
1464	M93716	Pan paniscus DNA fragment.	0.042
1465	X14385	Astasia longa chloroplast rps7 and tufA genes for ribosomal protein S7 and elongation factor Tu respectively	0.042

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1466	M74069	Saccharomyces cerevisiae endochitinase (CTS1-1) gene, complete cds.	0.042
1467	M73257	C.parasitica laccase (lac-1) gene, complete cds.	0.042
1468	M31126	Human pregnancy-specific beta-1-glycoprotein (SP1) mRNA, complete cds, clone hPS2.	0.042
1469	U70826	Fundulus heteroclitus vitellogenin II precursor mRNA, complete cds	0.041
1470	AF000299	Caenorhabditis elegans cosmid E03H12	0.041
1471	X83390	Albinaria coerulea complete mithochondria DNA	0.041
1472	L12582	Human ornithine decarboxylase (ODC) gene, 5' flanking region.	0.041
1473	D89655	Rattus norvegicus mRNA for scavenger receptor class B, complete cds	0.041
1474	Z23267	P.anserina AS1 gene, complete CDS	0.041
1475	M63868	C.hircus alpha-lactalbumin gene, exons 1-4.	0.041
1476	U56440	Human His-1 gene sequence	0.04
1477	L06863	Cricetulus griseus type VII collagen mRNA, 3' end.	0.04
1478	U02928	Dictyostelium discoideum Ax3 Rab7 mRNA, complete cds.	0.04
1479	M19828	Human apolipoprotein B-100 (apoB) gene, exons 22 through 29.	0.04
1480	M34434	Human angiotensin-converting enzyme (ACE) gene, 5' end.	0.04
1481	Z68884	Human DNA sequence from cosmid L21F12, Huntington's Disease Region, chromosome 4p16.3	0.04
1482	M99367	Pig alveolar macrophage-derived chemotactic factor-I (AMCF-I) mRNA, complete cds.	0.04
1483	U70370	Human hindlimb expressed homeobox protein backfoot (Bft) mRNA, complete cds	0.04
1484	U10698	Rattus norvegicus liver microsomal carboxylesterase mRNA, complete cds.	0.04
1485	U28171	Trypanosoma cruzi kinetoplast putative maxicircle divergent region.	0.04
1486	U79297	Human clone 23589 mRNA sequence	0.04
1487	X13764	Yeast centromere CEN1 repetitive DNA PSS113, part of dgIIa	0.04
1488	Z24568	H. sapiens (D9S286) DNA segment containing	0.04
1489	M63868	C.hircus alpha-lactalbumin gene, exons 1-4.	0.04
1490	X64143	F.trinervia ppcA1 gene for phosphoenolpyruvate carboxylase	0.039
1491	M16339	Entamoeba histolytica actin mRNA, complete cds.	0.039

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1492	U36475	Mus musculus breast and ovarian cancer susceptibility protein (Brca1) mRNA, complete cds	0.039
1493	X02570	Flesh fly gene for 25-kDa protein	0.039
1494	M32475	Rattus norvegicus carcinoembryonic antigen-related protein (CGM4) gene, exons 2 and 3.	0.039
1495	D89609	Oryzias latipes mRNA for choriogenin H, complete cds	0.039
1496	AF011573	Homo sapiens zinc finger protein (ZnF20) mRNA, complete cds	0.039
1497	X15050	Mouse mRNA for 3'-end of NCAM-120 isoform	0.039
1498	Z11533	D.discoideum rasG gene	0.038
1499	AB000450	Homo sapiens mRNA for VRK2, complete cds	0.038
1500	X78983	D.melanogaster Fab-7 regulatory region	0.038
1501	D89609	Oryzias latipes mRNA for choriogenin H, complete cds	0.038
1502	Z49535	S.cerevisiae chromosome X reading frame ORF YJR035w	0.038
1503	L13377	Staphylococcus aureus enterotoxin gene, 3' end.	0.035
1504	L12582	Human ornithine decarboxylase (ODC) gene, 5' flanking region.	0.035
1505	Z48584	Caenorhabditis elegans cosmid ZK1321, complete sequence [Caenorhabditis elegans]	0.023
1506	Y00204	Xenopus laevis mRNA fragment for nucleoplasmin	0.021
1507	S77817	light-chain fibroin [Galleria mellonella=waxmoths, larvae, cocoons, posterior silk glands, mRNA, 1191 nt]	0.021
1508	L13926	Trypanosoma cruzi (strain La Cruz, Jalisco) ribosomal RNA transcribed spacer and 18S ribosomal RNA gene, 5' end.	0.02
1509	Z78910	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA19B7	0.02
1510	AB007976	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0507	0.02
1511	U01307	Human scRNA (BC200 beta) pseudogene.	0.017
1512	J03998	P.falciparum glutamic acid-rich protein gnen, complete cds.	0.017
1513	X93497	H.sapiens TRAP gene, intron 4 (partial)	0.017
1514	M15656	Human aldolase B (ALDOB) gene, exons 7 through 9.	0.016
1515	X74965	H.sapiens ACPP gene for prostatic acid phosphatase (non-coding region)	0.016

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1516	X75653	A.longa plastid genes for ribosomal proteins and tRNAs	0.016
1517	X75653	A.longa plastid genes for ribosomal proteins and tRNAs	0.016
1518	X58852	Human MLC1emb gene for embryonic myosin alkaline light chain, exon 2	0.016
1519	U69695	Mus musculus hyaluronan synthase homolog mRNA, complete cds	0.016
1520	S45332	erythropoietin receptor [human, placental, Genomic, 8647 nt]	0.016
1521	U09865	Alcaligenes eutrophus pyruvate dehydrogenase dihydrolipoamide dehydrogenase (pdhL), and ORF3 genes, complete cds.	0.016
1522	U67815	Human primary Alu transcript	0.016
1523	AE000466	Escherichia coli K-12 MG1655 section 356 of 400 of the complete genome	0.016
1524	M80785	M.musculus tissue factor promoter (Cf-3) gene, exon 1.	0.016
1525	L37035	Drosophila virilis brown protein (bw) gene, complete cds.	0.016
1526	M15009	Mouse steroid 21-hydroxylase A (21-OHase A) gene, complete cds.	0.016
1527	U67500	Methanococcus jannaschii section 42 of 150 of the complete genome	0.016
1528	AB000044	Rhizoctonia solani 5.8S rRNA gene, complete sequence	0.016
1529	X52956	Human CAMII-psi3 calmodulin retropseudogene	0.016
1530	U80581	Pleurodeles waltl Wnt-7a mRNA, complete cds	0.016
1531	Z69918	Human DNA sequence from cosmid 91K3, Huntington's Disease Region, chromosome 4p16.3 contains CpG island	0.016
1532	Z98031	Human immunodeficiency virus type 1 nef gene immunodeficiency virus type 1 nef gene (strain KU15-1)	0.016
1533	D45858	Mus musculus mRNA for synaptotagumin III, complete cds	0.016
1534	L24549	Gallus gallus Gi2 protein alpha-subunit mRNA, complete cds.	0.016
1535	U66291	Catagonus wagneri cytochrome b gene, mitochondrial gene encoding mitochondrial protein, partial cds	0.016
1536	X63436	B.taurus mRNA for poly(A) polymerase	0.016
1537	L23498	Bovine microsatellite repeats	0.015

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1538	AF003086	Plasmodium falciparum transcription factor homolog PfSNF2L mRNA, complete cds	0.015
1539	U17377	Strongylocentrotus purpuratus cortical granule protein with LDL-receptor-like repeats mRNA, partial cds.	0.015
1540	L23498	Bovine microsatellite repeats	0.015
1541	X85117	H.sapiens epb72 gene exons 2,3,4,5,6,7	0.015
1542	Z16906	H. sapiens (D14S73) DNA segment containing	0.015
1543	X99400	S.pneumoniae dacA gene and ORF	0.015
1544	M32061	Rat alpha-2B-adrenergic receptor (RNG-alpha-2) mRNA, complete cds.	0.015
1545	X80930	S.cerevisiae RHC18 genes	0.015
1546	U09865	Alcaligenes eutrophus pyruvate dehydrogenase dihydrolipoamide dehydrogenase (pdhL), and ORF3 genes, complete cds.	0.015
1547	Z22952	Mus musculus BALB/c of p65 gene encoding p65 subunit of transcription factor NF-kappaB	0.015
1548	L34610	Mus musculus parathyroid hormone/parathyroid hormone related-peptide receptor (PTHR) gene, exons 5 - 9.	0.015
1549	Z54850	H.sapiens CpG island DNA genomic Mse1 fragment, clone 169b5, reverse read cpg169b5.rt1a	0.015
1550	U01307	Human scRNA (BC200 beta) pseudogene.	0.015
1551	M54994	Human bile salt-activated lipase (BAL) mRNA, complete cds.	0.015
1552	Z98031	Human immunodeficiency virus type 1 nef gene immunodeficiency virus type 1 nef gene (strain KU15-1)	0.015
1553	Z21858	M.Musculus mRNA for P domain protein	0.015
1554	M33518	Human HLA-B-associated transcript 2 (BAT2) gene, 3' end.	0.015
1555	AB001383	Rattus norvegicus mRNA for sialoprotein, complete cds	0.015
1556	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	0.014
1557	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	0.014
1558	J03764	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9.	0.014
1559	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	0.014
1560	AB003097	Fruitfly strain g20 mitochondrial DNA, A+T-rich region, partial sequence	0.014

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1561	AC001017	Homo sapiens (subclone 2_g8 from P1 H43) DNA sequence	0.014
1562	Z48484	H.sapiens gene for tissue-type plasminogen activator (enhancer)	0.014
1563	AC001460	Homo sapiens (subclone 2_f4 from BAC H107) DNA sequence	0.014
1564	U09865	Alcaligenes eutrophus pyruvate dehydrogenase dihydrolipoamide dehydrogenase (pdhL), and ORF3 genes, complete cds.	0.014
1565	U00691	Dictyostelium discoideum plasmid Ddp1 D2 orf, D1/D3 orf, G4/D5 orf, G5/D6 orf, G1 orf, G2/G3/D4 orf, complete cds	0.014
1566	D16482	Sarcophaga peregrina mRNA for poly(ADP-ribose) polymerase	0.014
1567	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	0.014
1568	M63599	Human myelin basic protein (MBP) gene, exon 1.	0.014
1569	U03891	Human phorbolin I mRNA, partial cds.	0.014
1570	X53422	D. grimshawi s18, s15, s19 and s16 chorion protein genes	0.013
1571	X01870	Yeast mitochondrial ori(o) repeat unit of petite mutant 4 (petite strain a-10/3/2/B11)	0.013
1572	Z92804	Caenorhabditis elegans cosmid K05D4, complete sequence [Caenorhabditis elegans]	0.013
1573	M76377	Human cysteine-rich protein (CRP) gene, exons 3 and 4.	0.013
1574	D29801	Mouse mRNA for unknown product, complete cds	0.013
1575	U77984	Sus scrofa microsatellite S0058 sequence	0.013
1576	Z55882	H.sapiens CpG island DNA genomic Mse1 fragment, clone 70g8, reverse read cpg70g8.rt1a	0.013
1577	V00531	Human interferon genes LeIF-L and LeIF-J and pseudogene LeIF-M with intergenic regions. These genes are located on chromosome 9	0.013
1578	Z74361	S.cerevisiae chromosome IV reading frame ORF YDR065w	0.013
1579	D00374	Herpes simplex virus type 1 (HSV-1) genome, rightmost part of the long unique region (UL) and all of the internal long repeat region (IRL)	0.013
1580	U53502	Arabidopsis thaliana chromosome I cosmid g17311 DNA.	0.013
1581	K03196	Human interferon-beta-3 gene.	0.013
1582	M23456	Zea mays (clone pCIB808) encoding maize nitrite reductase (NiR) cDNA to mRNA, partial cds.	0.013

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1583	X66120	H.sapiens F8VWFL DNA of the von Willebrand factor pseudogene (5'portion)	0.013
1584	M63962	Human gastric H,K-ATPase catalytic subunit gene, complete cds.	0.011
1585	AF039592	Homo sapiens succinate dehydrogenase subunit C	0.007
1586	Y10908	B.cereus cysA and wapA genes	0.007
1587	AF048988	Homo sapiens MutS homolog 5 (MSH5) gene, exons 1 through 9	0.007
1588	AF048988	Homo sapiens MutS homolog 5 (MSH5) gene, exons 1 through 9	0.007
1589	D90822	E.coli genomic DNA, Kohara clone #331(40.1-40.4 min.)	0.007
1590	D87903	Mouse mRNA for ARF6, complete cds	0.006
1591	L38851	Mycobacterium tuberculosis cell surface protein	0.006
1592	U66362	Human neuronal nitric oxide synthase (nNOS) gene, alternatively spliced 5' exon Tex 2 and flanking sequences	0.005
1593	L11670	Human transmembrane glycoprotein (CD53) gene, exons 2 through 8.	0.005
1594	U20587	Sus scrofa domestica sister of P-glycoprotein	0.005
1595	U53016	Human DXYS154 microsatellite sequence	0.005
1596	Z29641	Zea mays of USE gene encoding U3snRNA	0.005
1597	D16473	Human mRNA, Xq terminal portion	0.005
1598	X02175	Schizosaccharomyces pombe cdc10 start gene	0.005
1599	U25029	Human glucocorticoid receptor alpha mRNA, variant 3' UTR	0.005
1600	Z68685	Human DNA sequence from cosmid N2E9 on chromosome 22, complete sequence [Homo sapiens]	0.005
1601	U40369	Human spermidine/spermine N1-acetyltransferase	0.005
1602	U06965	Aphytis melinus mitochondrion 16S rRNA gene, partial sequence.	0.005
1603	Z81014	Human DNA sequence from cosmid U65A4, between markers DXS366 and DXS87 on chromosome X *	0.005
1604	X91923	H.sapiens ECE-1 gene (exon 3)	0.005
1605	Z29641	Zea mays of USE gene encoding U3snRNA	0.005
1606	L11670	Human transmembrane glycoprotein (CD53) gene, exons 2 through 8.	0.005
1607	U15605	Nicotiana glutinosa virus resistance (N) gene, complete cds.	0.005
1608	X57698	A.thaliana DNA for acyl carrier protein (ACP) gene A1	0.005

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1609	L81391	Homo sapiens (subclone 2_a6 from P1 H39) DNA sequence	0.005
1610	X81789	H.sapiens mRNA for splicing factor SF3a60	0.005
1611	X82818	H.sapiens PTP1C/HCP gene	0.005
1612	U33465	Drosophila melanogaster S element and flanking sequence, clone pS5.	0.005
1613	Z75042	S.cerevisiae chromosome XV reading frame ORF YOR134w	0.005
1614	M98574	Mouse T cell receptor rearranged alpha--chain variable region, N_region, joining region, and constant region mRNA.	0.005
1615	X51907	Human vimentin gene 5' regulatory region	0.005
1616	U50383	Human retinoic acid-responsive protein (NN8-4AG) mRNA, complete cds	0.005
1617	M25140	Human cardiac alpha-myosin heavy chain (MYH6) gene, exons 2, 3 and 4.	0.005
1618	X66062	G.max tufA gene for chloroplast translation elongation factor EF-Tu	0.005
1619	U16345	Gallus gallus protein kinase gene (cPITSLRE) gene, exons 4 and 5.	0.005
1620	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	0.005
1621	U43834	Saccharomyces cerevisiae chromosome IV lambda 3073 and flanking region extending into right telomere	0.005
1622	X13602	Caldocellum saccharolyticum celB gene for cellobiohydrolase/endocellulase	0.005
1623	J04809	Human cytosolic adenylate kinase (AK1) gene, complete cds.	0.005
1624	L49144	Homo sapiens neuroendocrine-specific protein (NSP) gene, exons 1B and 3	0.005
1625	L34028	Plasmodium falciparum (clone HB3) heat shock protein 86 gene, complete cds.	0.005
1626	U50383	Human retinoic acid-responsive protein (NN8-4AG) mRNA, complete cds	0.005
1627	U23829	Lucilia cuprina peritrophin-95 precursor gene, partial cds.	0.005
1628	AE000629.1	Helicobacter pylori 26695 section 107 of 134 of the complete genome	0.005
1629	M16446	Human adenine phosphoribosyltransferase (APRT) gene, complete cds.	0.005
1630	U34605	Human retinoic acid- and interferon-inducible 58K protein RI58 mRNA, complete cds.	0.005

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1631	M25140	Human cardiac alpha-myosin heavy chain (MYH6) gene, exons 2, 3 and 4.	0.005
1632	X16426	Mouse MHC (Qa) Q10-k gene for class I antigen	0.005
1633	M83985	Mouse phosphoprotein (F1-20) mRNA, complete cds.	0.005
1634	U31850	Human dystonin isoform 1 mRNA, partial cds	0.005
1635	U31850	Human dystonin isoform 1 mRNA, partial cds	0.005
1636	X64615	O.berteriana chloroplast ORF80 (exon 1 and 2) and ORF2280 sequences	0.005
1637	X52647	E.coli dbpA gene for DEAD box protein A	0.005
1638	D90773	E.coli genomic DNA, Kohara clone #262(30.3-30.5 min.)	0.005
1639	M62946	S.glaucescens novel deletion/rearrangement sequence, partial sequence.	0.005
1640	M88597	Saccharomyces cerevisiae STP1 gene, complete cds.	0.005
1641	L31521	Homo sapiens (clone HG52) Z-crystallin/quinone reductase (CRYZ) gene sequence.	0.005
1642	D79986	Human mRNA for KIAA0164 gene, complete cds	0.004
1643	AC002183	Homo sapiens (subclone 2_h8 from BAC H111) DNA sequence	0.004
1644	Z29641	Zea mays of USE gene encoding U3snRNA	0.004
1645	L22415	Homo sapiens DNA sequence, repeat region.	0.004
1646	U17357	Chlamydomonas reinhardtii chloroplast 30S ribosomal protein S4 (rps4) gene, complete cds.	0.004
1647	M67465	Rat 3-beta-hydroxysteroid dehydrogenase/delta-5-delta-4-ene-isomerase mRNA, complete cds.	0.004
1648	U08421	Murine rotavirus EC outer capsid protein VP4 gene, complete cds.	0.004
1649	Z17089	H. sapiens (D3S1309) DNA segment containing	0.002
1650	L35531	Human Alu repeat region.	0.002
1651	M55120	Human cystic fibrosis transmembrane conductance regulator (CFTR) gene, exon 14b	0.002
1652	J00922	Gallus gallus ovalbumin (Y) gene, complete cds.	0.002
1653	U69695	Mus musculus hyaluronan synthase homolog mRNA, complete cds	0.002
1654	L15248	Human (clone: pHyTM1/60(R)) DNA sequence.	0.002
1655	L35676	Homo sapiens (subclone H8 2_e7 from P1 35 H5 C8) DNA sequence.	0.002
1656	L48612	Theileria parva (clone pTprUgB) ORF genes, partial cds.	0.002
1657	Y08925	P.falciparum aarp3 gene, exon	0.002
1658	M60441	Sheep lambda immunoglobulin V gene.	0.002
1659	X91857	Piromyces sp. mRNA for mannanase A	0.002

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1660	Z35948	S.cerevisiae chromosome II reading frame ORF YBR079c	0.002
1661	X16277	Human gene for ornithine decarboxylase ODC (EC 4.1.1.17)	0.002
1662	X78608	G.gallus genomic DNA repeat region, clone 9C2	0.002
1663	U48449	Human skeletal muscle ryanodine receptor gene	0.002
1664	X51875	Human breakpoint in translocation V-kappa gene region (WB) (partial) (537 bp)	0.002
1665	Z24205	H. sapiens (D12S348) DNA segment containing	0.002
1666	U85612	Mus musculus cartilage-derived retinoic acid-sensitive protein/melanoma inhibitory activity protein gene, complete cds	0.002
1667	M61829	Human alpha-1,3-mannosyl-glycoprotein beta-1, 2-N-acetylglucosaminyltransferase (MGAT) gene, complete cds.	0.002
1668	M61829	Human alpha-1,3-mannosyl-glycoprotein beta-1, 2-N-acetylglucosaminyltransferase (MGAT) gene, complete cds.	0.002
1669	V00571	Human gene encoding prepro form of corticotropin releasing factor	0.002
1670	D29760	Candida maltosa gene for chitin synthase 1, partial sequence	0.002
1671	AJ001817	Dama sp. mRNA for bone morphogenetic protein 2	0.002
1672	Z23575	H. sapiens (D17S926) DNA segment containing	0.002
1673	X59359	T.marmorata mRNA for acetylcholinesterase	0.002
1674	D12519	Rat SAP gene for synaptotagmin associated 35kDa protein	0.002
1675	U88534	Mus musculus glucose-6-phosphate dehydrogenase protein, exons 10, 11 and partial cds	0.002
1676	Z24391	H. sapiens (D11S1350) DNA segment containing	0.002
1677	M31773	Murine B cell 1 (mb-1) gene, complete cds.	0.002
1678	U28014	Human cysteine protease (ICErel-II) mRNA, complete cds.	0.002
1679	M33518	Human HLA-B-associated transcript 2 (BAT2) gene, 3' end.	0.002
1680	U70983	Pseudomonas aeruginosa heptosyl transferase II Pseudomonas aeruginosa heptosyl transferase II (rfaF) gene, complete cds	0.002
1681	Z74854	S.cerevisiae chromosome XV reading frame ORF YOL112w	0.002
1682	M13498	Mouse renal kallikrein gene mGK-6, exon 1	0.002

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1683	U17382	Streptococcus pyogenes putative multiple membrane domain protein gene, complete cds.	0.002
1684	U14189	Plasmodium falciparum MCP1 mRNA, complete cds	0.001
1685	M27314	Saccharomyces cerevisiae mitochondrial petite mutant BB5 origin of replication DNA.	0.001
1686	M64089	Dictyostelium discoideum calmodulin (calA) gene, complete cds.	0.001
1687	J05138	Rabbit calcium binding protein (calreticulin) mRNA, complete cds.	0.0009
1688	U92017	Human clone 199288 defective mariner transposon Hsmar2 mRNA sequence	0.0008
1689	AJ011915	Homo sapiens mRNA for synaptosome associated protein of 23 kilodaltons, isoform A	0.0008
1690	AJ223734	Sus scrofa SCAMP1 gene, exon 1 and joined CDS	0.0008
1691	Y08924	P.falciparum mRNA for AARP2 protein	0.0006
1692	X58139	Human coxVIb gene, last exon and flanking sequence	0.0006
1693	U47853	Araneus diadematus fibroin-1 (ADF-1) mRNA, partial cds	0.0006
1694	L34027	Plasmodium falciparum (clone Dd2) heat shock protein 86 gene, complete cds.	0.0006
1695	D88271	Human (lambda) DNA for immunogloblin light chain	0.0006
1696	AC001546	Homo sapiens (subclone 2_b1 from P1 H69) DNA sequence	0.0006
1697	Z96325	H.sapiens telomeric DNA sequence, clone 16QTEL024, read 16QTELOO024.seq	0.0006
1698	U14974	Saccharomyces cerevisiae Nmd2p (NMD2) gene, complete cds. > :: gb|I70400|I70400 Sequence 1 from patent US 5679566	0.0006
1699	AB002331	Human mRNA for KIAA0333 gene, partial cds	0.0006
1700	AE000464	Escherichia coli K-12 MG1655 section 354 of 400 of the complete genome	0.0006
1701	Z79060	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA21F12	0.0005
1702	Z60233	H.sapiens CpG island DNA genomic Mse1 fragment, clone 197c9, reverse read cpg197c9.rt1a	0.0005
1703	U15018	Dugbe virus L protein gene, complete cds	0.0005
1704	X77607	H. sapiens genomic DNA (leukocyte), corresponding to the integration site of HPV 6a DNA in a tonsillar carcinoma	0.0005
1705	M59428	T.thermophila ribosomal protein L37 (L37) mRNA, complete cds.	0.0005

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1706	M59428	T.thermophila ribosomal protein L37 (L37) mRNA, complete cds.	0.0005
1707	AC002219	Homo sapiens (subclone 2_d11 from P1 H43) DNA sequence	0.0005
1708	X95276	P.falciparum complete gene map of plastid-like DNA (IR-B)	0.0005
1709	L18972	Homo sapiens anonymous gene, complete cds	0.0005
1710	U96974	Homo sapiens MET proto-oncogene, intron 5, 3' end	0.0005
1711	Z60916	H.sapiens CpG island DNA genomic Mse1 fragment, clone 39a5, forward read cpg39a5.ft1c	0.0005
1712	X99587	A.brasilense ipdC, gltX & cysS genes	0.0005
1713	J03998	P.falciparum glutamic acid-rich protein gnen, complete cds.	0.0005
1714	AE000464	Escherichia coli K-12 MG1655 section 354 of 400 of the complete genome	0.0005
1715	U21730	Human 5'-nucleotidase (CD73) gene, partial cds.	0.0004
1716	M22970	Human pancreatic phospholipase A-2 (PLA-2) gene, exons 1 to 3.	0.0003
1717	U37022	Human cyclin-dependent kinase 4 (CDK4) gene, complete cds	0.0002
1718	AC001517	Homo sapiens (subclone 1_g5 from P1 H49) DNA sequence	0.0002
1719	X90383	A.thaliana DNA for Y13 gene	0.0002
1720	NM_003407.1	Homo sapiens zinc finger protein homologous to Zfp-36 in mouse (ZFP36) mRNA > :: gb|M92843|HUMG0S24A H.sapiens zinc finger transcriptional regulator mRNA, complete cds.	0.0002
1721	M86528	Human neurotrophin-4 (NT-4) gene, complete cds.	0.0002
1722	M86528	Human neurotrophin-4 (NT-4) gene, complete cds.	0.0002
1723	U19241	Homo sapiens interferon-gamma receptor alpha chain gene, exon 1	0.0002
1724	M15205	Human thymidine kinase gene, complete cds, with clustered Alu repeats in the introns.	0.0002
1725	M87510	Mouse Y specific region of AC11 DNA sequence, LINE repeat and Bkm satellite.	0.0002
1726	Z84723	Human DNA sequence from phage LAW2 from a contig from the tip of the short arm of chromosome 16, spanning 2Mb of 16p13.3 Contains Interleukin 9 receptor pseudogene	0.0002
1727	X01392	Human apolipoprotein CIII gene and apo AI-apo CIII intergenic region	0.0002
1728	Z92910	H.sapiens HFE (HLA-H) gene	0.0002

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1729	D87001	Human (lambda) DNA for immunoglobulin light chain	0.0002
1730	M35612	Yeast (S.cerevisiae) mitochondrial autonomously replicating sequence DNA.	0.0002
1731	Z16956	H. sapiens (D2S154) DNA segment containing	0.0002
1732	L42456	Mus musculus TGF-1 gene, promoter region and exon 1.	0.0002
1733	X90383	A.thaliana DNA for Y13 gene	0.0002
1734	L35657	Homo sapiens (subclone H8 5_a10 from P1 35 H5 C8) DNA sequence.	0.0002
1735	M57902	Mouse transforming growth factor-beta-1	0.0002
1736	U67167	Homo sapiens intestinal mucin (MUC2) gene, promoter region and partial cds	0.0002
1737	NM_002824.1	Homo sapiens parathymosin (PTMS) mRNA > :: gb|M24398|HUMTHYP Human parathymosin mRNA, complete cds.	0.0002
1738	J05138	Rabbit calcium binding protein (calreticulin) mRNA, complete cds.	0.0002
1739	U96566	HIV-1 patient JO population variant JOS17 from USA, envelope glycoprotein, C2-V5 region (env) gene, partial cds	0.0002
1740	AF043461	Homo sapiens I-REL gene, exon 9	9e-005
1741	M96943	Human profilaggrin gene exons 1-3, 5' end.	8e-005
1742	S45332	erythropoietin receptor [human, placental, Genomic, 8647 nt]	7e-005
1743	S45332	erythropoietin receptor [human, placental, Genomic, 8647 nt]	7e-005
1744	L28125	Podospora anserina beta transducin-like protein	7e-005
1745	U53017	Human microsatellite marker sJCW13	6e-005
1746	M86528	Human neurotrophin-4 (NT-4) gene, complete cds.	6e-005
1747	D17554	Human mRNA for DNA-binding protein, TAXREB107, complete cds	6e-005
1748	U26556	Human ferritin H (FTHL13) pseudogene.	6e-005
1749	Z79060	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA21F12	6e-005
1750	AC001460	Homo sapiens (subclone 2_f4 from BAC H107) DNA sequence	6e-005
1751	AC001033	Homo sapiens (subclone 2_c2 from P1 H48) DNA sequence	6e-005
1752	AF007883	Homo sapiens MHC class II HLA-DRB1 (HLA-DRB1*10) intron 1 sequence	6e-005
1753	U12971	Tetrahymena thermophila CU428.1VII micronuclear M region DNA	6e-005

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1754	X83872	H.vulgaris mRNA for cAMP response element binding protein	6e-005
1755	Z73360	Human DNA sequence from cosmid 92M18, BRCA2 gene region chromosome 13q12-13	5e-005
1756	X85116	H.sapiens epb72 gene exon 1	5e-005
1757	L81639	Homo sapiens (subclone 2_b2 from P1 H39) DNA sequence	3e-005
1758	D16184	Chicken mRNA for nuclear b-Zip protein MafF, complete cds	3e-005
1759	AF100694	Mus musculus Pontin52 mRNA, complete cds	3e-005
1760	Z30978	G.gorilla DNA for Mhc Alu elements	3e-005
1761	L23429	Canis beta-galactosides-binding lectin (LGALS3) mRNA, 3'end.	2e-005
1762	X06559	Human interferon-inducible gene IFI-56K 5' region (56 kDa coding capacity of unknown function)	2e-005
1763	AC001546	Homo sapiens (subclone 2_b1 from P1 H69) DNA sequence	2e-005
1764	L35658	Homo sapiens (subclone H8 9_d12 from P1 35 H5 C8) DNA sequence.	2e-005
1765	D16472	Human mRNA, Xq terminal portion	2e-005
1766	M83665	Human high mobility group 2 protein (HMG-2) gene, complete cds.	2e-005
1767	U07977	Human T cell receptor beta (TCRBV9S1, TCRBV7S1) genes, TCRBV inserted and TCRBV deleted haplotype, partial cds.	2e-005
1768	D83227	Populus nigra gene for extensin like protein, complete cds	2e-005
1769	U42053	Mustela vison microsatellite repeat (Mvi 24).	2e-005
1770	L29339	Homo sapiens Na+/glucose cotransporter (SGLT1) gene, exon 15 and complete cds.	2e-005
1771	Z33620	M.musculus (Balb/c) GATA-3 gene (partial)	2e-005
1772	D88271	Human (lambda) DNA for immunogloblin light chain	2e-005
1773	AD000833	Homo sapiens DNA from chromosome 19-cosmid f19399 (~17 kb EcoRI restriction fragment)	2e-005
1774	U36755	Human thrombin receptor (F2R) gene, 5' region and partial exon 1	2e-005
1775	AC002252	Homo sapiens (subclone 1_g7 from BAC H76) DNA sequence	2e-005
1776	AE000464	Escherichia coli K-12 MG1655 section 354 of 400 of the complete genome	2e-005
1777	X94768	H.sapiens RP3 gene (XLRP gene 3)	1e-005
1778	U57058	Human WD protein IR10 pre-mRNA, partial cds	9e-006

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1779	AC001603	Homo sapiens (subclone 2_a9 from PAC H92) DNA sequence	8e-006
1780	Z47046	Human cosmid QLL2C9 from Xq28	7e-006
1781	U93275	Mus musculus glucokinase gene, 5' flanking region	7e-006
1782	X60653	human Histone H3.3 pseudogene (CIR-456)	7e-006
1783	L81583	Homo sapiens (subclone 3_g2 from P1 H11) DNA sequence	6e-006
1784	L13381	Plasmodium falciparum HB3\W2 transport protein	6e-006
1785	U97576	Homo sapiens TRE17 oncogene-associated G0S19-2/MIP1alpha gene, downstream sequence	6e-006
1786	Y11204	V.carteri gene encoding volvoxopsin	6e-006
1787	Z16794	H. sapiens (D4S409) DNA segment containing (CA) repeat; clone AFM183xd6; single read	6e-006
1788	D83737	Human coagulation factor XII gene, intron 2	6e-006
1789	X04871	Paramecium primaurelia macronuclear DNA telomeric region (EBGI3)	6e-006
1790	M14292	Human L1Heg repetitive element from the intergenic region of the epsilon and G-gamma globin genes.	6e-006
1791	NM_003734.1	Homo sapiens amine oxidase, copper containing 3 gb|U39447|HSU39447 Human placenta copper monamine oxidase mRNA, complete cds	6e-006
1792	M27147	Human alpha-2-plasmin inhibitor, allele A, 5' end.	6e-006
1793	X86012	Human DNA sequence from intron 22 of the factor VIII gene, Xq28. Contains the end of a 9.5kb repeated region, int22h-1, involved in many cases of haemophilia	6e-006
1794	M33216	Human aortic-type smooth muscle alpha-actin	3e-006
1795	Z83334	H.sapiens RPS3a gene	2e-006
1796	M57682	Rat brain calcium channel alpha-1 subunit mRNA, complete cds.	2e-006
1797	M19817	Human apolipoprotein B-100 (apoB) gene, intron J.	2e-006
1798	Z24068	H. sapiens (D22S427) DNA segment containing	2e-006
1799	Z50155	X.laevis mRNA for insulin-like growth factor I receptor	2e-006
1800	Y12839	H.sapiens BH30 mRNA	2e-006
1801	Z70041	Human DNA sequence from cosmid U39H5, between markers DXS6791 and DXS8038 on chromosome X	2e-006
1802	Z80128	H.sapiens CACNL1A4 gene, exons 16 and 17	2e-006
1803	U80893	Mus musculus CAG trinucleotide repeat mRNA, partial sequence	2e-006

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1804	Z63192	H.sapiens CpG island DNA genomic Mse1 fragment, clone 7a7, forward read cpg7a7.ft1d	2e-006
1805	U72964	Human hepatocyte nuclear factor 4-alpha gene, exon 5	2e-006
1806	AC002183	Homo sapiens (subclone 2_h8 from BAC H111) DNA sequence	2e-006
1807	S73557	annexin II=36 kDa calcium-dependent phospholipid-binding protein [rats, RBL-2H3 basophilic leukemia cells, mRNA, 1362 nt]	2e-006
1808	U79258	Human clone 23732 mRNA, partial cds	8e-007
1809	Z62146	H.sapiens CpG island DNA genomic Mse1 fragment, clone 64b2, forward read cpg64b2.ft1a	8e-007
1810	U44381	Human tissue inhibitor of metalloproteinases-2	8e-007
1811	Z65575	H.sapiens CpG island DNA genomic Mse1 fragment, clone 47c5, reverse read cpg47c5.rt1a	7e-007
1812	J03764	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9.	7e-007
1813	X75349	H.sapiens 5'flanking DNA for clotting factor IX	7e-007
1814	Z73360	Human DNA sequence from cosmid 92M18, BRCA2 gene region chromosome 13q12-13	7e-007
1815	Z73360	Human DNA sequence from cosmid 92M18, BRCA2 gene region chromosome 13q12-13	7e-007
1816	X77624	H.sapiens simple sequence clone pg2m3, 5' flank and repeats	7e-007
1817	S46857	SCL/TCL5/tal-1=stem-cell leukemia {germline chromosome 3 translocation/deletion breakpoint} [human, bone marrow cells, Genomic Mutant, 239 nt]	7e-007
1818	J03998	P.falciparum glutamic acid-rich protein gnen, complete cds.	7e-007
1819	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	3e-007
1820	U47654	Human pyruvate kinase PK-R gene, partial cds, and pyruvate kinase PK-L gene, complete cds.	3e-007
1821	U78096	Human macrophage colony stimulating factor receptor (c-fms) gene, exon 1A, 2 and partial cds	3e-007
1822	L76927	Human galactokinase (GALK1) gene, complete cds	3e-007
1823	U22086	Ursus americanus clone G10H GT and ATTT microsatellite region.	3e-007
1824	J03069	Human MYCL2 gene, complete cds.	3e-007
1825	X82640	D.melanogaster mRNA for alpha 1,2 mannosidase	3e-007
1826	U18671	Human Stat2 gene, complete cds.	2e-007

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1827	L02935	Human major breakpoint cluster region (BCR) gene, exons 1-3 and repeat regions.	2e-007
1828	L04193	Human lens membrane protein (mp19) gene, exon 11.	2e-007
1829	AC001050	Homo sapiens (subclone 3_e9 from P1 H55) DNA sequence	2e-007
1830	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	2e-007
1831	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	9e-008
1832	L78776	Homo sapiens (subclone 2_a7 from P1 H49) DNA sequence	9e-008
1833	U41315	Human ring zinc-finger protein (ZNF127-Xp) gene and 5' flanking sequence.	9e-008
1834	X95586	H.sapiens MB1 gene	9e-008
1835	M33387	Human debrisoquine 4-hydroxylase (CYP2D8P) and	9e-008
1836	U09954	Human ribosomal protein L9 gene, 5' region and complete cds.	8e-008
1837	Z15030	H.sapiens gene for ventricular myosin light chain 2 > :: gb|L01652|HUMVMLC Human ventricular myosin light chain 2 gene, seven exons.	8e-008
1838	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	8e-008
1839	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	8e-008
1840	Z77974	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA5D12	8e-008
1841	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	8e-008
1842	L81802	Homo sapiens (subclone 1_c12 from P1 H31) DNA sequence	8e-008
1843	D87001	Human (lambda) DNA for immunoglobulin light chain	8e-008
1844	Z23971	H. sapiens (D2S338) DNA segment containing (CA) repeat; clone AFM276zf5; single read	8e-008
1845	X89398	H.sapiens ung gene for uracil DNA-glycosylase	3e-008
1846	Z68212	Phocine Herpesvirus 1 DNA (clone 4; 280 bp)	3e-008
1847	M85145	Human tumor necrosis factor receptor, 3' flank.	3e-008
1848	M17919	Human DNA with homology to EBV IR3 repeat, clone Hu3.	3e-008
1849	M21339	Human non-histone chromosomal protein HMG-14 gene, complete cds.	3e-008

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1850	Z69655	Human DNA sequence from cosmid L98A6, Huntington's Disease Region, chromosome 4p16.3	3e-008
1851	S83526	red photopigment gene {Alu repeat region, long intron 1} [human, peripheral blood leucocytes, Genomic, 1987 nt]	3e-008
1852	M11809	Human (2'-5') oligo A synthetase E gene, exon 7 and flanks.	3e-008
1853	X94768	H.sapiens RP3 gene (XLRP gene 3)	3e-008
1854	X62025	H.sapiens rod cG-PDE G gene for 3', 5'-cyclic nucleotide phosphodiesterase	3e-008
1855	NM_000694.1	Homo sapiens aldehyde dehydrogenase 7 (ALDH7) mRNA > :: gb|U10868|HSU10868 Human aldehyde dehydrogenase ALDH7 mRNA, complete cds.	3e-008
1856	U22086	Ursus americanus clone G10H GT and ATTT microsatellite region.	3e-008
1857	AC001174	Homo sapiens (subclone 1_e2 from BAC H94) DNA sequence	3e-008
1858	X69908	H.sapiens gene for mitochondrial ATP synthase c subunit (P2 form)	2e-008
1859	X91233	H.sapiens IL15 gene	2e-008
1860	M61835	Human lactase phlorizin hydrolase (LCT) gene, exon 2.	1e-008
1861	M29324	Mouse L1Md-A13 repetitive sequence.	1e-008
1862	AF021806	Rattus norvegicus connexin 40 (GJA5) mRNA, complete cds	1e-008
1863	AB002584	Rattus norvegicus mRNA for beta-alanine-pyruvate aminotransferase, complete cds	1e-008
1864	Z54147	Human DNA sequence from cosmid L129H7, Huntington's Disease Region, chromosome 4p16.3 contains CpG island	9e-009
1865	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	9e-009
1866	Z54349	H.sapiens MN/CA9 GENE	8e-009
1867	M21487	Human muscle creatine kinase gene (CKMM), 5' flank.	3e-009
1868	U02993	Human cytochrome P450 (Cyp1A2) gene, 5' region.	3e-009
1869	Z78893	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA18H12	3e-009
1870	U89387	Human RNA polymerase II subunit hsRPB4 gene, complete cds	3e-009
1871	X57413	Mouse mRNA for transforming growth factor-beta2	3e-009

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1872	Z94828	G.gallus microsatellite DNA (LEI0260	3e-009
1873	D26067	Human mRNA for KIAA0033 gene, partial cds	3e-009
1874	AB001914	Homo sapiens PACE4 gene, exon 23-25, complete cds	3e-009
1875	Z75894	Human DNA sequence from cosmid U61F10, between markers DXS366 and DXS87 on chromosome X contains ESTs	3e-009
1876	AC001443	Homo sapiens (subclone 2_f10 from BAC 2913	3e-009
1877	M96851	Human CpG island containing upstream sequence	3e-009
1878	D64108	Human mRNA for DMC1 homologue, complete cds	3e-009
1879	S80861	{junction region} [human, KOPT-K1 cells, T-cell acute lymphoblastic leukemia patient, Genomic, 895 nt]	3e-009
1880	U79776	Mus musculus ajuba (Ajuba) mRNA, complete cds	2e-009
1881	S75283	thyrotropin-releasing hormone receptor [human, Genomic, 2312 nt, segment 2 of 2]	1e-009
1882	X14445	Human int-2 proto-oncogene	1e-009
1883	J03764	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9.	1e-009
1884	L36911	Pig microsatellite DNA (CA repeat)	1e-009
1885	U79746	Homo sapiens serotonin transporter (hSERT) gene, promoter region, exons 1B and 2, and partial cds	9e-010
1886	X56668	Human DNA for calretinin exon 1	9e-010
1887	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	9e-010
1888	X77738	H.sapiens red cell anion exchanger (EPB3, AE1, Band 3) gene, 3' region	4e-010
1889	L02897	Dog nonerythroid beta-spectrin mRNA, 3' end.	3e-010
1890	D45198	Human mRNA for template acyivating factor-I alpha, complete cds	3e-010
1891	X04981	H.sapiens gene for lecithin-cholesterol acyltransferase (LCAT)	3e-010
1892	M14292	Human L1Heg repetitive element from the intergenic region of the epsilon and G-gamma globin genes.	3e-010
1893	X14448	Human GLA gene for alpha-D-galactosidase A (EC 3.2.1.22)	3e-010
1894	Z96616	H.sapiens telomeric DNA sequence, clone 4QTEL025, read 4QTELOO025.seq	3e-010
1895	M12901	Human c-mos pseudogene with Alu repeat insertions, partial cds	2e-010

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1896	Z68885	Human DNA sequence from cosmid L21F12B, Huntington's Disease Region, chromosome 4p16.3, contains EST	1e-010
1897	L77036	Homo sapiens (subclone 5_d9 from P1 H19) DNA sequence.	1e-010
1898	Z58927	H.sapiens CpG island DNA genomic Mse1 fragment, clone 116g2, reverse read cpg116g2.rt1a	1e-010
1899	L77036	Homo sapiens (subclone 5_d9 from P1 H19) DNA sequence.	1e-010
1900	Z79007	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA20E2	1e-010
1901	Z75891	Human DNA sequence from cosmid F45C1 on chromosome 22q12-qter	1e-010
1902	Z72930	S.cerevisiae chromosome VII reading frame ORF YGR145w	1e-010
1903	Z36111	S.cerevisiae chromosome II reading frame ORF YBR242w	5e-011
1904	Z54147	Human DNA sequence from cosmid L129H7, Huntington's Disease Region, chromosome 4p16.3 contains CpG island	4e-011
1905	X87579	H.sapiens CD4 gene	4e-011
1906	U43604	Human unidentified mRNA, partial sequence.	4e-011
1907	U08024	Human clone A dehydroepiandrosterone sulfotransferase (STD) mRNA, complete cds.	4e-011
1908	M27825	B.lactucae heat shock protein 70 (hsp70) gene, complete cds.	4e-011
1909	Z15026	H.sapiens genes for tumor necrosis factor (Tnfa) and lymphotoxine (Tnfb)	3e-011
1910	Z67997	Human DNA sequence from cosmid L206D7, Huntington's Disease Region, chromosome 4p16.3	3e-011
1911	AC001046	Homo sapiens (subclone 3_f2 from P1 H54) DNA sequence	2e-011
1912	Z84518	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA28C9	1e-011
1913	M59709	Human carcinoembryonic antigen (CEA) gene, exon 10.	1e-011
1914	L35670	Homo sapiens (subclone H8 10_g5 from P1 35 H5 C8) DNA sequence.	1e-011
1915	AF012899	Sambucus nigra ribosome inactivating protein precursor mRNA, complete cds	1e-011
1916	Z96209	H.sapiens telomeric DNA sequence, clone 12PTEL055, read 12PTELOO055.seq	1e-011
1917	U34052	Human Down Syndrome region of chromosome 21, genomic sequence, clone A35A7-1A2.	1e-011

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1918	Z96489	H.sapiens telomeric DNA sequence, clone 21QTEL007, read 21QTELOO007.seq	1e-011
1919	AC001036	Homo sapiens (subclone 2_f7 from P1 H48) DNA sequence	1e-011
1920	L42098	Homo sapiens (subclone 5_c7 from P1 H22) DNA sequence.	6e-012
1921	X93341	H.sapiens mitochondrial control region DNA	5e-012
1922	D26141	Human NF1 gene homologue	4e-012
1923	U80228	Human clotting factor VIII gene, intron 20 and exon 21, partial sequence	4e-012
1924	U16812	Human Bak-2 gene, complete cds.	4e-012
1925	Z68758	Human DNA sequence from cosmid cN85E10 on chromosome 22q11.2-qter	4e-012
1926	AC001449	Homo sapiens (subclone 2_f10 from P1 H103) DNA sequence	4e-012
1927	D50561	Human DNA, replication enhancing element (REE1)	4e-012
1928	Z96387	H.sapiens telomeric DNA sequence, clone 18PTEL033, read 18PTELOO033.seq	1e-012
1929	AF004338	Homo sapiens 16S ribosomal RNA, mitochondrial gene, partial sequence	1e-012
1930	M15360	Human transposon-like element (THE) p2 solo LTR with inserted Alu element.	1e-012
1931	L81577	Homo sapiens (subclone 3_h8 from P1 H11) DNA sequence	1e-012
1932	U56979	Human complement factor H precursor (Cfh) gene, partial cds	1e-012
1933	U14550	Human sialyltransferase SThM (sthm) mRNA, complete cds.	1e-012
1934	M31061	Human ornithine decarboxylase gene, complete cds.	1e-012
1935	U06752	Rattus norvegicus Fisher 344 pre-sialomucin complex (pSMC) mRNA, repeat sequences 10-14, partial cds.	1e-012
1936	U06752	Rattus norvegicus Fisher 344 pre-sialomucin complex (pSMC) mRNA, repeat sequences 10-14, partial cds.	1e-012
1937	L29096	Homo sapiens oriP binding protein (OBP-2) mRNA, complete cds.	1e-012
1938	U50156	Human DNA segment containing CA repeat at locus D8S1926.	5e-013
1939	X65708	H.sapiens RRM1 gene for ribonucleoside diphosphate reductase M1 subunit	5e-013
1940	M61107	Human p22-phox (CYBA) gene, exons 3 and 4.	5e-013

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1941	AC001502	Homo sapiens (subclone 2_c7 from P1 H43) DNA sequence	4e-013
1942	X69951	H.sapiens gene for casein kinase II alpha subunit > subunit alpha [human, Genomic, 18862 nt]	4e-013
1943	AC002252	Homo sapiens (subclone 1_g7 from BAC H76) DNA sequence	4e-013
1944	Z74029	Caenorhabditis elegans cosmid C45B11, complete sequence [Caenorhabditis elegans]	4e-013
1945	U90544	Human sodium phosphate transporter (NPT3) mRNA, complete cds	4e-013
1946	L77032	Homo sapiens (subclone 3_e5 from P1 H16) DNA sequence.	2e-013
1947	X55367	Human alpha-satellite DNA from clone pTRA-2	2e-013
1948	U40369	Human spermidine/spermine N1-acetyltransferase	2e-013
1949	Z25749	H.sapiens gene for ribosomal protein S7	2e-013
1950	M96838	Human proteinase 3 gene, exons 2 and 3.	2e-013
1951	Z73116	S.cerevisiae chromosome XII reading frame ORF YLL011w	2e-013
1952	U90544	Human sodium phosphate transporter (NPT3) mRNA, complete cds	2e-013
1953	U90544	Human sodium phosphate transporter (NPT3) mRNA, complete cds	2e-013
1954	AC001016	Homo sapiens (subclone 2_f8 from P1 H43) DNA sequence	1e-013
1955	D00596	Homo sapiens gene for thymidylate synthase, exons 1, 2, 3, 4, 5, 6, 7, complete cds	1e-013
1956	X80240	H.sapiens endogenous retrovirus HERV-KC4 DNA	1e-013
1957	M86181	Human prosaposin (PSAP) gene.	5e-014
1958	V00710	Human mitochondrial genes for several tRNAs (Phe, Val, Leu) and 12S and 16S ribosomal RNAs	5e-014
1959	Z62151	H.sapiens CpG island DNA genomic Mse1 fragment, clone 64c7, forward read cpg64c7.ft1a	5e-014
1960	NM_002187.1	Homo sapiens interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) (IL12B) mRNA > :: gb|M65290|HUMNKSFP40 Human natural killer cell stimulatory factor (NKSF) mRNA, complete cds, clone p40.	5e-014
1961	M18680	Homo sapiens 5S rRNA pseudogene.	5e-014
1962	X06274	Human endogenous retrovirus-like sequence (LTR ERS P1-1) 3'-LTR region	5e-014
1963	D00835	Human immunodeficiency virus type 2 proviral DNA, complete genome	5e-014

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1964	V00581	Human Alu repetitive sequence located near the insulin gene > :: gb|J00268|HUMINS02 Human insulin gene: repetitive sequence in 3' flank.	5e-014
1965	Z95437	Human DNA sequence from cosmid A1 on chromosome 6 contains ESTs. HERV like retroviral sequence	5e-014
1966	AB001051	Dugesia japonica mRNA for ADP-ribosylation factor, complete cds	5e-014
1967	AB001051	Dugesia japonica mRNA for ADP-ribosylation factor, complete cds	5e-014
1968	M59709	Human carcinoembryonic antigen (CEA) gene, exon 10.	2e-014
1969	X91233	H.sapiens IL15 gene	2e-014
1970	X12718	Human Retrovirus mRNA for LTR (clone cPB-3)	2e-014
1971	V00531	Human interferon genes LeIF-L and LeIF-J and pseudogene LeIF-M with intergenic regions. These genes are located on chromosome 9	1e-014
1972	M14292	Human LIHeg repetitive element from the intergenic region of the epsilon and G-gamma globin genes.	1e-014
1973	X56998	Human UbA52 adrenal mRNA for ubiquitin-52 amino acid fusion protein	1e-014
1974	S74906	E1 beta=pyruvate dehydrogenase beta {promoter}	8e-015
1975	M18680	Homo sapiens 5S rRNA pseudogene.	6e-015
1976	L49046	Homo sapiens (subclone 2_h3 from P1 H25) DNA sequence.	6e-015
1977	M18680	Homo sapiens 5S rRNA pseudogene.	6e-015
1978	U93037	Homo sapiens elastin gene, exons 5-27 and alternatively spliced products, partial cds	6e-015
1979	M76741	Homo sapiens biliary glycoprotein (BGP) gene, partial cds.	6e-015
1980	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	6e-015
1981	AB000931	Homo sapiens FUT2 gene, intron 1, complete sequence	6e-015
1982	M83137	Human scaffold-attached region (SAR) DNA.	6e-015
1983	M18680	Homo sapiens 5S rRNA pseudogene.	5e-015
1984	Z63454	H.sapiens CpG island DNA genomic Mse1 fragment, clone 84d2, reverse read cpg84d2.rt1a	5e-015
1985	Z63454	H.sapiens CpG island DNA genomic Mse1 fragment, clone 84d2, reverse read cpg84d2.rt1a	5e-015
1986	X97489	H.sapiens PIT1/GHF1 gene silencer region	5e-015
1987	X55367	Human alpha-satellite DNA from clone pTRA-2	2e-015
1988	Z22795	H.sapiens microsatellite repeat	2e-015

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
1989	D38112	Human mitochondrial DNA, complete sequence	2e-015
1990	X69951	H.sapiens gene for casein kinase II alpha subunit subunit alpha [human, Genomic, 18862 nt]	2e-015
1991	M59250	Homo sapiens cytochrome c oxidase subunit Vb	2e-015
1992	X15965	Rabbit DNA for L1Oc5 repeat	2e-015
1993	X70052	S.cerevisiae sofl gene	2e-015
1994	M86667	H.sapiens NAP (nucleosome assembly protein) mRNA, complete cds	1e-015
1995	X78212	H.sapiens diamine oxidase gene	7e-016
1996	U21928	Human fructose-1,6-biphosphatase (FBP1) gene, exon 4	7e-016
1997	AB001051	Dugesia japonica mRNA for ADP-ribosylation factor, complete cds	7e-016
1998	AC002181	Homo sapiens (subclone 2_a12 from BAC H111) DNA sequence	6e-016
1999	X91413	H.sapiens DNA for X-linked dinucleotide repeat polimorphism (clone YCA3CL149)	6e-016
2000	U65487	Human ribosomal RNA upstream binding transcription factor (UBTF) gene, partial cds	6e-016
2001	Z69920	Human DNA sequence from cosmid 91K3, Huntington's Disease Region, chromosome 4p16.3	6e-016
2002	U92818	Homo sapiens c33.28 unnamed HERV-H protein mRNA, partial cds	6e-016
2003	J03799	Human colin carcinoma laminin-binding protein mRNA, complete cds.	3e-016
2004	Z68885	Human DNA sequence from cosmid L21F12B, Huntington's Disease Region, chromosome 4p16.3, contains EST	2e-016
2005	U75285	Homo sapiens apoptosis inhibitor survivin gene, complete cds	2e-016
2006	M23442	Human interleukin 4 (IL-4) gene, complete cds.	2e-016
2007	U18270	Human thymopoietin (TMPO) gene, exons 4 and 5, and complete cds for thymopoietin alpha	2e-016
2008	AD000833	Homo sapiens DNA from chromosome 19-cosmid f19399 (~17 kb EcoRI restriction fragment)	2e-016
2009	AD000833	Homo sapiens DNA from chromosome 19-cosmid f19399 (~17 kb EcoRI restriction fragment)	2e-016
2010	Y14823	Drosophila melanogaster SURF-4 gene and gene encoding seryl-tRNA synthetase	2e-016
2011	U67167	Homo sapiens intestinal mucin (MUC2) gene, promoter region and partial cds	8e-017
2012	Z96177	H.sapiens telomeric DNA sequence, clone 10QTEL040, read 10QTELOO040.seq	7e-017

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2013	AF003533	Homo sapiens cytosolic phagocyte oxidase protein (p47phox) gene, promoter region and partial cds	7e-017
2014	NM_000151.1	Homo sapiens glucose-6-phosphatase, catalytic glucose 6-phosphatase mRNA, complete cds. > :: gb|I15157|I15157 Sequence 1 from patent US 5460942	7e-017
2015	X94912	H.sapiens Pr22 gene	7e-017
2016	U10580	Human junction sequence from chimeric/rearranged YAC yRM2252, chromosome 11p14.	7e-017
2017	M22970	Human pancreatic phospholipase A-2 (PLA-2) gene, exons 1 to 3.	7e-017
2018	X02152	Human mRNA for lactate dehydrogenase-A (LDH-A, EC 1.1.1.27)	6e-017
2019	Z68755	Human DNA sequence from cosmid L118D5, Huntington's Disease Region, chromosome 4p16.3	6e-017
2020	M64804	Human microsatellite DNA repeat region DNA. > :: gb|I31115|I31115 Sequence 27 from patent US 5582979	3e-017
2021	Z92910	H.sapiens HFE (HLA-H) gene	3e-017
2022	X74984	H.sapiens 5' flanking region of CD14 gene	2e-017
2023	U05333	Mus musculus co-chaperonin 'cofactor A' mRNA, complete cds.	2e-017
2024	U48485	Human skeletal muscle ryanodine receptor gene	2e-017
2025	X97869	H.sapiens gene encoding La autoantigen	2e-017
2026	X17579	Human specific HS5 DNA	2e-017
2027	U36445	Bos taurus calcium-activated chloride channel mRNA, complete cds	2e-017
2028	L06845	Human cysteinyl-tRNA synthetase mRNA, partial cds.	2e-017
2029	X93334	H.sapiens mitochondrial DNA, complete genome	8e-018
2030	X62996	H.sapiens mitochondrial genome (consensus sequence)	8e-018
2031	M98479	Human transglutaminase mRNA, 3' untranslated region.	8e-018
2032	L42568	Homo sapiens (clone lSW11-1) non-gastric H,K-ATPase (ATP1AL1) gene, exons 15-17	8e-018
2033	S52659	lactoferrin {5' region, promoter} [human, placenta, Genomic, 2086 nt]	8e-018
2034	U66707	Rattus norvegicus densin-180 mRNA, complete cds	8e-018
2035	X76683	Plasmid vector pHM2 betalactamase gene	3e-018
2036	U66707	Rattus norvegicus densin-180 mRNA, complete cds	3e-018

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2037	D17201	Human HepG2 3' region MboI cDNA, clone hmd3d04m3	3e-018
2038	Z24281	H. sapiens (D12S355) DNA segment containing	2e-018
2039	AC001443	Homo sapiens (subclone 2_f10 from BAC 2913	2e-018
2040	U73522	Homo sapiens AMSH mRNA, complete cds	1e-018
2041	L77040	Homo sapiens (subclone 8_c11 from P1 H22) DNA sequence.	9e-019
2042	X93496	H.sapiens TRAP gene, 5' flanking region	9e-019
2043	X54816	Human gene for alpha-1-microglobulin-bikunin, exons 1-5 (encoding alpha-1-microglobulin, N-terminus.)	9e-019
2044	L35240	Human enigma gene, complete cds	8e-019
2045	Z46940	H.sapiens PRM1 gene, PRM2 gene and TNP2 gene	8e-019
2046	U60801.1	Human poly(A)-binding protein (PABP) processed pseudogene2, complete cds	8e-019
2047	NM_002484.1	Homo sapiens nucleotide binding protein 1 Human nucleotide-binding protein mRNA, complete cds.	4e-019
2048	X76683	Plasmid vector pHM2 betalactamase gene	3e-019
2049	U40369	Human spermidine/spermine N1-acetyltransferase	3e-019
2050	D13624	Human Wilms tumor gene encoding WT1 protein, exon 6	3e-019
2051	D13624	Human Wilms tumor gene encoding WT1 protein, exon 6	3e-019
2052	D86566	Human DNA for NOTCH4, partial cds	3e-019
2053	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	3e-019
2054	U86759	Human netrin-2 like protein (NTN2l) mRNA, complete cds	3e-019
2055	X78454	X.laevis AB21 mRNA for RPD3 homologue	3e-019
2056	NM_000969.1	Homo sapiens ribosomal protein L5 (RPL5) mRNA complete cds.	1e-019
2057	U49869	Human ubiquitin gene, complete cds	1e-019
2058	X78901	H.sapiens (lambda63) DNA of apolipoprotein cluster	9e-020
2059	U32515	Human putative tumor suppressor (MXI1) gene, exons 4, 5, and 6, and complete cds	9e-020
2060	D87717	Human mRNA for KIAA0013 gene, complete cds	5e-020
2061	Z68758	Human DNA sequence from cosmid cN85E10 on chromosome 22q11.2-qter	3e-020
2062	Z30584	R.norvegicus (wistar) mRNA for ZG-16p	3e-020
2063	Z68758	Human DNA sequence from cosmid cN85E10 on chromosome 22q11.2-qter	3e-020

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2064	M58600	Human heparin cofactor II (HCF2) gene, exons 1 through 5.	3e-020
2065	U93037	Homo sapiens elastin gene, exons 5-27 and alternatively spliced products, partial cds	3e-020
2066	L38951	Homo sapiens importin beta subunit mRNA, complete cds	2e-020
2067	D26141	Human NF1 gene homologue	1e-020
2068	M18796	Orangutan beta- and delta-globin gene intergenic region with 2 Alu repeats.	1e-020
2069	Z47046	Human cosmid QLL2C9 from Xq28	1e-020
2070	AC001443	Homo sapiens (subclone 2_f10 from BAC 2913	1e-020
2071	X15965	Rabbit DNA for L1Oc5 repeat	1e-020
2072	U86453	Human phosphatidylinositol 3-kinase catalytic subunit p110delta mRNA, complete cds	6e-021
2073	M90058	Human serglycin gene, exons 1,2, and 3.	4e-021
2074	L81932	Homo sapiens (subclone 9_h2 from P1 H21) DNA sequence	4e-021
2075	X68258	Bicistronic transcription units (pSBC-2)	3e-021
2076	L78777	Homo sapiens (subclone 2_b8 from P1 H49) DNA sequence	3e-021
2077	J01415	Human mitochondrion, complete genome	1e-021
2078	L43411	Homo sapiens (subclone 5_g5 from P1 H25) DNA sequence.	1e-021
2079	NM_000967.1	Homo sapiens ribosomal protein L3 (RPL3) mRNA protein L3	1e-021
2080	Z81014	Human DNA sequence from cosmid U65A4, between markers DXS366 and DXS87 on chromosome X *	1e-021
2081	U93037	Homo sapiens elastin gene, exons 5-27 and alternatively spliced products, partial cds	1e-021
2082	X78454	X.laevis AB21 mRNA for RPD3 homologue	1e-021
2083	X82825	A.thaliana PRL1 mRNA	1e-021
2084	J01415	Human mitochondrion, complete genome	4e-022
2085	Z68885	Human DNA sequence from cosmid L21F12B, Huntington's Disease Region, chromosome 4p16.3, contains EST	4e-022
2086	L81690	Homo sapiens (subclone 1_c2 from P1 H56) DNA sequence	4e-022
2087	Z47046	Human cosmid QLL2C9 from Xq28	4e-022
2088	Z73360	Human DNA sequence from cosmid 92M18, BRCA2 gene region chromosome 13q12-13	1e-022
2089	L78776	Homo sapiens (subclone 2_a7 from P1 H49) DNA sequence	1e-022

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2090	Z96210	H.sapiens telomeric DNA sequence, clone 12PTEL057, read 12PTELOO057.seq	5e-023
2091	Z50751	H.sapiens mRNA for B4B	4e-023
2092	U14567	***ALU WARNING: Human Alu-J subfamily consensus sequence	4e-023
2093	L35657	Homo sapiens (subclone H8 5_a10 from P1 35 H5 C8) DNA sequence.	4e-023
2094	Z81315	Human DNA sequence from fosmid F62D4 on chromosome 22q12-qter > :: emb|Z81316|HSF62D4A Human DNA sequence from fosmid F62D4 on chromosome 22, complete sequence	4e-023
2095	U93237	Human menin (MEN1) gene, complete cds	1e-023
2096	M16660	Human 90-kDa heat-shock protein gene, cDNA, complete cds.	1e-023
2097	Z93943	Human DNA sequence from cosmid U235H3 on chromosome X	6e-024
2098	M84334	Macacca mulatta hnRNP A1-gamma isoform mRNA, complete cds.	5e-024
2099	Z73360	Human DNA sequence from cosmid 92M18, BRCA2 gene region chromosome 13q12-13	5e-024
2100	L32754	Homo sapiens Ig-associated signalling molecule	5e-024
2101	AC002252	Homo sapiens (subclone 1_g7 from BAC H76) DNA sequence	5e-024
2102	NM_000982.1	Homo sapiens ribosomal protein L21 (RPL21) mRNA > :: gb|U25789|HSU25789 Human ribosomal protein L21 mRNA, complete cds.	5e-024
2103	NM_000397.1	Homo sapiens cytochrome b-245, beta polypeptide encoding mitochondrial protein, mRNA > :: emb|X04011|HSXCGD Human mRNA of X-CGD gene involved in chronic granulomatous disease located on chromosome X	5e-024
2104	L19086	Human LINE1 (L1.3) repetitive element DNA sequence.	4e-024
2105	U88531	Bos taurus phosphatidylinositol 4-kinase mRNA, complete cds	2e-024
2106	D38112	Human mitochondrial DNA, complete sequence	2e-024
2107	NM_003011.1	Homo sapiens SET translocation (myeloid leukemia-associated) (SET) mRNA > :: gb|M93651|HUMSET Human set gene, complete cds.	2e-024
2108	M98512	Human NFG genomic fragment.	2e-024
2109	NM_001019.1	Homo sapiens ribosomal protein S15a for ribosomal protein S15a	2e-024

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2110	X70991	H.sapiens MADER mRNA	2e-024
2111	X14445	Human int-2 proto-oncogene	2e-024
2112	AC001174	Homo sapiens (subclone 1_e2 from BAC H94) DNA sequence	2e-024
2113	D86566	Human DNA for NOTCH4, partial cds	2e-024
2114	Z78885	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA18G12	1e-024
2115	X82272	Human endogenous retrovirus env mRNA	1e-024
2116	Z96167	H.sapiens telomeric DNA sequence, clone 10QTEL017, read 10QTELOO017.seq	6e-025
2117	L38951	Homo sapiens importin beta subunit mRNA, complete cds	6e-025
2118	X53575	Yeast RPL7 gene for ribosmal protein L7	6e-025
2119	L77040	Homo sapiens (subclone 8_c11 from P1 H22) DNA sequence.	5e-025
2120	Z23957	H. sapiens (D2S336) DNA segment containing (CA) repeat; clone AFM275yf5; single read	5e-025
2121	X14445	Human int-2 proto-oncogene	5e-025
2122	L39062	Homo sapiens interleukin 9 receptor IL9R pseudogene, exons 1-9	2e-025
2123	Z84723	Human DNA sequence from phage LAW2 from a contig from the tip of the short arm of chromosome 16, spanning 2Mb of 16p13.3 Contains Interleukin 9 receptor pseudogene	2e-025
2124	AC001174	Homo sapiens (subclone 1_e2 from BAC H94) DNA sequence	2e-025
2125	NM_001423.1	Homo sapiens epithelial membrane protein 1 Progression Associated Protein	2e-025
2126	X14445	Human int-2 proto-oncogene	2e-025
2127	M68841	Human L1 repetitive sequence with a region homologous to a mouse ORF.	2e-025
2128	X97489	H.sapiens PIT1/GHF1 gene silencer region	2e-025
2129	X73501	H.sapiens gene for cytokeratin 20	1e-025
2130	U48363	Mus musculus transcriptional activator alpha-NAC	1e-025
2131	X01037	Human 7SL RNA sequence	7e-026
2132	M22485	Human ring chromosome 21 [r(21)] breakpoint DNA.	2e-026
2133	K03429	Ape (chimpanzee) 28S ribosomal RNA gene.	2e-026
2134	AF053644	Homo sapiens cellular apoptosis susceptibility protein (CSE1) gene, exon 2	9e-027
2135	L06900	Human dystrophin gene, intron 1 containing pseudo exon.	7e-027

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SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2136	U18271	Human thymopoietin (TMPO) gene, partial exon 6, complete exon 7, partial exon 8, and partial cds for thymopoietin beta	7e-027
2137	X05323	Human MRC OX-2 gene signal sequence	7e-027
2138	M99065	Rat core histone (MacroH2A.1) mRNA, complete cds.	7e-027
2139	X01037	Human 7SL RNA sequence	6e-027
2140	M22485	Human ring chromosome 21 [r(21)] breakpoint DNA.	2e-027
2141	D50494	Mouse mRNA for murine RCK, complete cds	2e-027
2142	M14292	Human L1Heg repetitive element from the intergenic region of the epsilon and G-gamma globin genes.	2e-027
2143	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	7e-028
2144	NM_001030.1	Homo sapiens ribosomal protein S27 gb|L19739|HUMMPSI Homo sapiens metallopanstimulin (MPS1) mRNA, complete cds. > :: gb|I60224|I60224 Sequence 1 from patent US 0035585	7e-028
2145	AC002186	Homo sapiens (subclone 1_f12 from P1 H115) DNA sequence	7e-028
2146	M22485	Human ring chromosome 21 [r(21)] breakpoint DNA.	3e-028
2147	Z95437	Human DNA sequence from cosmid A1 on chromosome 6 contains ESTs. HERV like retroviral sequence	2e-028
2148	NM_001025.1	Homo sapiens ribosomal protein S23 (RPS23) mRNA > :: dbj|D14530|HUMRSPT Human homolog of yeast ribosomal protein S28, complete cds	2e-028
2149	Z95437	Human DNA sequence from cosmid A1 on chromosome 6 contains ESTs. HERV like retroviral sequence	2e-028
2150	Z62151	H.sapiens CpG island DNA genomic Mse1 fragment, clone 64c7, forward read cpg64c7.ft1a	1e-028
2151	Z62151	H.sapiens CpG island DNA genomic Mse1 fragment, clone 64c7, forward read cpg64c7.ft1a	8e-029
2152	X62996	H.sapiens mitochondrial genome (consensus sequence)	8e-029
2153	Z62151	H.sapiens CpG island DNA genomic Mse1 fragment, clone 64c7, forward read cpg64c7.ft1a	8e-029
2154	AC001518	Homo sapiens (subclone 2_b4 from P1 H49) DNA sequence	8e-029

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2155	X56932	H.sapiens mRNA for 23 kD highly basic protein	8e-029
2156	U93563	Human L1 element L1.6 putative p150 gene, complete cds	8e-029
2157	Z96282	H.sapiens telomeric DNA sequence, clone 13QTEL058, read 13QTELOO058.seq	8e-029
2158	NM_002892.1	Homo sapiens retinoblastoma-binding protein 1 (RBBP1) mRNA > :: gb|S66427|S66427 RBP1=retinoblastoma binding protein 1 [human, Nalm-6 pre-B cell leukemia, mRNA, 4834 nt]	7e-029
2159	M12855	Human endogenous retrovirus DNA downstream of 5' LTR, clone HERV-K22.	3e-029
2160	X86012	Human DNA sequence from intron 22 of the factor VIII gene, Xq28. Contains the end of a 9.5kb repeated region, int22h-1, involved in many cases of haemophilia	3e-029
2161	L81840	Homo sapiens (subclone 1_f8 from P1 H43) DNA sequence	3e-029
2162	Z11711	H.sapiens gene for alpha-2 macroglobulin, exon 1	3e-029
2163	X61453	M.musculus mRNA for H19 clone	3e-029
2164	NM_003389.1	Homo sapiens WD repeat domain 2 (WDR2) mRNA > complete cds	1e-029
2165	L81840	Homo sapiens (subclone 1_f8 from P1 H43) DNA sequence	9e-030
2166	L05173	Homo sapiens chromosome 21 DNA fragment with Alu, L1 and O repetitive elements.	8e-030
2167	M12855	Human endogenous retrovirus DNA downstream of 5' LTR, clone HERV-K22.	3e-030
2168	M12855	Human endogenous retrovirus DNA downstream of 5' LTR, clone HERV-K22.	3e-030
2169	J05211	Human desmoplakin mRNA, 3' end.	3e-030
2170	Z96167	H.sapiens telomeric DNA sequence, clone 10QTEL017, read 10QTELOO017.seq	3e-030
2171	M12855	Human endogenous retrovirus DNA downstream of 5' LTR, clone HERV-K22.	3e-030
2172	AC002186	Homo sapiens (subclone 1_f12 from P1 H115) DNA sequence	3e-030
2173	L35657	Homo sapiens (subclone H8 5_a10 from P1 35 H5 C8) DNA sequence.	3e-030
2174	L35657	Homo sapiens (subclone H8 5_a10 from P1 35 H5 C8) DNA sequence.	3e-030
2175	L39061	Homo sapiens transcription factor SL1 mRNA, partial cds.	3e-030
2176	AF010313	Homo sapiens Pig8 (PIG8) mRNA, complete cds	1e-030
2177	AC001443	Homo sapiens (subclone 2_f10 from BAC 2913	1e-030

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2178	Z62151	H.sapiens CpG island DNA genomic Mse1 fragment, clone 64c7, forward read cpg64c7.ft1a	3e-031
2179	AF010312	Homo sapiens Pig7 (PIG7) mRNA, complete cds	1e-031
2180	U77085	Human epithelial membrane protein (CL-20) mRNA, complete cds	1e-031
2181	D29805	Human mRNA for beta-1,4-galactosyltransferase, complete cds	1e-031
2182	Z95437	Human DNA sequence from cosmid A1 on chromosome 6 contains ESTs. HERV like retroviral sequence	1e-031
2183	X62996	H.sapiens mitochondrial genome (consensus sequence)	1e-031
2184	U80409	Lactococcus lactis cremoris glucose inhibited division protein homolog GidA (gidA) gene, partial cds	4e-032
2185	X00525	Mouse 28S ribosomal RNA	1e-032
2186	U35032	Human endogenous retrovirus clone c5.11, HERV-H multiply spliced subgenomic leader, protease and integrase region mRNA, partial cds	1e-032
2187	Z75894	Human DNA sequence from cosmid U61F10, between markers DXS366 and DXS87 on chromosome X contains ESTs	1e-032
2188	U22055	Human 100 kDa coactivator mRNA, complete cds.	1e-032
2189	M98509	Human NFB genomic fragment.	5e-033
2190	D38112	Human mitochondrial DNA, complete sequence	2e-033
2191	Z69364	Human DNA sequence from cosmid L96F8, Huntington's Disease Region, chromosome 4p16.3 contains EST and cDNA > :: emb|Z69365|HSL96F8A Human DNA sequence from cosmid L96F8, Huntington's Disease Region, chromosome 4p16.3 contains EST and cDNA	5e-034
2192	U59695	Human apurinic/apyrimidinic endonuclease (HAP1) gene, 5' upstream region	5e-034
2193	L35657	Homo sapiens (subclone H8 5_a10 from P1 35 H5 C8) DNA sequence.	2e-034
2194	L78778	Homo sapiens (subclone 2_e10 from P1 H49) DNA sequence	2e-034
2195	V00662	H.sapiens mitochondrial genome	5e-035
2196	M30629	Human pregnancy-specific glycoprotein beta-1	5e-035
2197	NM_003134.1	Homo sapiens signal recognition particle 14kD (homologous Alu RNA-binding protein) (SRP14) mRNA > recognition particle subunit 14	5e-035

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2198	U93572	Human L1 element L1.25 p40 and putative p150 genes, complete cds	2e-035
2199	Z96176	H.sapiens telomeric DNA sequence, clone 10QTEL038, read 10QTELOO038.seq	6e-036
2200	V00710	Human mitochondrial genes for several tRNAs (Phe, Val, Leu) and 12S and 16S ribosomal RNAs	6e-036
2201	Z78715	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA15A2	5e-036
2202	U93574	Human L1 element L1.39 p40 and putative p150 genes, complete cds	2e-036
2203	S63912	D10S102=FBRNP [human, fetal brain, mRNA, 3043 nt]	1e-036
2204	AB011137	Homo sapiens mRNA for KIAA0565 protein, complete cds	1e-036
2205	Z55370	H.sapiens CpG island DNA genomic Mse1 fragment, clone 37a7, forward read cpg37a7.ft1a	7e-037
2206	L36720	Homo sapiens bystin mRNA, complete cds	7e-037
2207	S45936	HTS1=HeLa tumor suppressor gene [human, revertant clone F2, mRNA Partial, 2687 nt]	7e-037
2208	U36755	Human thrombin receptor (F2R) gene, 5' region and partial exon 1	6e-037
2209	D50694	Rattus norvegicus mRNA for proteasomal ATPase	3e-037
2210	AB001325	Human AQP3 gene for aquaporine 3 (water channel), partail cds	2e-037
2211	L35657	Homo sapiens (subclone H8 5_a10 from P1 35 H5 C8) DNA sequence.	2e-037
2212	U36445	Bos taurus calcium-activated chloride channel mRNA, complete cds	2e-037
2213	X66292	P.pygmaeus (OX3910-11) alphoid repetitive DNA	7e-038
2214	D38112	Human mitochondrial DNA, complete sequence	6e-038
2215	Z16571	H. sapiens (D12S80) DNA segment containing (CA) repeat; clone AFM102xd6; single read	6e-038
2216	D50561	Human DNA, replication enhancing element (REE1)	3e-038
2217	X66292	P.pygmaeus (OX3910-11) alphoid repetitive DNA	8e-039
2218	Z73360	Human DNA sequence from cosmid 92M18, BRCA2 gene region chromosome 13q12-13	7e-039
2219	M25718	Human rDNA and 4 Alu repeats.	4e-039
2220	NM_000397.1	Homo sapiens cytochrome b-245, beta polypeptide encoding mitochondrial protein, mRNA > :: emb|X04011|HSXCGD Human mRNA of X-CGD gene involved in chronic granulomatous disease located on chromosome X	3e-039

Table 2A Nearest Neighbor (BlastN vs GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2221	M13073	Human metallothionein I processed pseudogene, complete cds.	2e-039
2222	Z78715	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA15A2	3e-040
2223	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	3e-040
2224	Z12962	H.sapiens mRNA for homologue to yeast ribosomal protein L41	3e-040
2225	Z78715	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA15A2	9e-041
2226	AC001443	Homo sapiens (subclone 2_f10 from BAC 2913	4e-041
2227	Z73360	Human DNA sequence from cosmid 92M18, BRCA2 gene region chromosome 13q12-13	3e-041
2228	S72304	rah=ras-related homolog [mice, HT4 neural cell line, mRNA, 993 nt]	3e-041
2229	AC001443	Homo sapiens (subclone 2_f10 from BAC 2913	1e-041
2230	U49974	Human mariner2 transposable element, complete consensus sequence	1e-041
2231	L26507	Mouse myocyte nuclear factor (MNF) mRNA, complete cds.	1e-041
2232	U08191	Human R kappa B mRNA, complete cds.	1e-042
2233	D11078	Homo sapiens RGH2 gene, retrovirus-like element	1e-042
2234	U83908	Human nuclear antigen H731 mRNA, complete cds	1e-042
2235	X63209	B.taurus CI-ASHI mRNA for ubiquinone oxidoreductase complex	1e-042
2236	NM_002743.1	Homo sapiens protein kinase C substrate 80K-H (PRKCSH) mRNA > :: gb|J03075|HUMG19P1A Human 80K-H protein (kinase C substrate) mRNA, complete cds.	1e-042
2237	L78777	Homo sapiens (subclone 2_b8 from P1 H49) DNA sequence	4e-043
2238	Z59382	H.sapiens CpG island DNA genomic Mse1 fragment, clone 152b10, reverse read cpg152b10.rt1a	1e-043
2239	L12469	Gallus gallus (max) gene, complete cds.	1e-043
2240	U72789	Homo sapiens cosmid clone U197H5 from Xp22.1-22.2, complete sequence [Homo sapiens]	5e-044
2241	AF004161	Oryctolagus cuniculus peroxisomal Ca-dependent solute carrier mRNA, complete cds	5e-044
2242	M22485	Human ring chromosome 21 [r(21)] breakpoint DNA.	2e-044

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2243	Z60212	H.sapiens CpG island DNA genomic Mse1 fragment, clone 195c8, forward read cpg195c8.ft1a	2e-045
2244	M22485	Human ring chromosome 21 [r(21)] breakpoint DNA.	2e-045
2245	AF004161	Oryctolagus cuniculus peroxisomal Ca-dependent solute carrier mRNA, complete cds	2e-045
2246	D38112	Human mitochondrial DNA, complete sequence	1e-045
2247	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	6e-046
2248	Z69925	Human DNA sequence from cosmid cN116A5, on chromosome 22q12-qter contains exon trap	5e-046
2249	U12404	Human Csa-19 mRNA, complete cds.	5e-046
2250	Y07969	H.sapiens mRNA for APRIL protein	2e-046
2251	X90583	H.sapiens mRNA for rat translocon-associated protein delta homolog	2e-046
2252	L35657	Homo sapiens (subclone H8 5_a10 from P1 35 H5 C8) DNA sequence.	2e-046
2253	NM_001762.1	Homo sapiens chaperonin containing T-complex subunit 6 (CCT6) mRNA > :: gb|L27706|HUMTCP20 Human chaperonin protein (Tcp20) gene complete cds.	2e-046
2254	AF008563	Kluyveromyces lactis centromere-binding factor 5	7e-047
2255	NM_002137.1	Homo sapiens heterogeneous nuclear ribonucleoprotein A2/B1 (HNRPA2B1) mRNA > :: gb|M29065|HUMRNPA2A Human hnRNP A2 protein mRNA.	5e-047
2256	NM_001866.1	Homo sapiens cytochrome c oxidase subunit VIIb (COX7B), nuclear gene encoding mitochondrial protein, mRNA > :: emb|Z14244|HSCOX7BM H.sapiens coxVIIb mRNA for cytochrome c oxidase subunit VIIb	3e-047
2257	Z55938	H.sapiens CpG island DNA genomic Mse1 fragment, clone 74a1, reverse read cpg74a1.rt1a	2e-047
2258	U31278	Homo sapiens mitotic feedback control protein Madp2 homolog mRNA, complete cds	2e-047
2259	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	2e-047
2260	NM_003295.1	Homo sapiens tumor protein, translationally-controlled 1 (TPT1) mRNA > :: emb|X16064|HSTUMP Human mRNA for translationally controlled tumor protein	7e-048

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2261	NM_003503.1	Homo sapiens CDC7 (cell division cycle 7, S. cerevisiae, homolog)-like 1 (CDC7L1) mRNA, and translated products > :: gb|AF015592|AF015592 Homo sapiens Cdc7	3e-048
2262	Z62151	H.sapiens CpG island DNA genomic Mse1 fragment, clone 64c7, forward read cpg64c7.ft1a	2e-048
2263	L11877	Homo sapiens dUTP nucleotidohydrolase mRNA, 5' end.	8e-049
2264	L40403	Homo sapiens (clone zap3) mRNA, 3' end of cds	3e-049
2265	M81600	Human NAD(P)H:quinone oxireductase gene, exon 6 >	2e-049
2266	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	8e-050
2267	M31004	Human nuclear phosphoprotein B23 mRNA, clone hpB2.	8e-050
2268	Z97207	Mus musculus mRNA for B-IND1 protein	8e-050
2269	AF007775	Rattus norvegicus aquaporin-pancreas and liver	3e-050
2270	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	9e-051
2271	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	9e-051
2272	X06683	Mouse mRNA for Cu-Zn superoxide dismutase (EC 1.15.1.1) > :: gb|M35725|MUSCZSOD Mouse Cu-Zn superoxide dismutase mRNA, complete cds.	9e-051
2273	X93334	H.sapiens mitochondrial DNA, complete genome	3e-051
2274	U27197	Drosophila melanogaster pelota (pelo) mRNA, complete cds	3e-051
2275	D87953	Human mRNA for RTP, complete cds	1e-051
2276	L81869	Homo sapiens (subclone 1_c4 from P1 H55) DNA sequence	4e-052
2277	D63876	Human mRNA for KIAA0154 gene, partial cds	4e-052
2278	D14659	Human mRNA for KIAA0103 gene, complete cds	3e-052
2279	X93334	H.sapiens mitochondrial DNA, complete genome	4e-053
2280	D38112	Human mitochondrial DNA, complete sequence	4e-053
2281	U97519	Homo sapiens podocalyxin-like protein mRNA, complete cds	4e-053
2282	L35657	Homo sapiens (subclone H8 5_a10 from P1 35 H5 C8) DNA sequence.	4e-053
2283	D63876	Human mRNA for KIAA0154 gene, partial cds	4e-053
2284	D38112	Human mitochondrial DNA, complete sequence	1e-053
2285	Z57342	H.sapiens CpG island DNA genomic Mse1 fragment, clone 172a12, forward read cpg172a12.ft1a	1e-053

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2286	Z64479	H.sapiens CpG island DNA genomic Mse1 fragment, clone 127c4, reverse read cpg127c4.rt1a	1e-053
2287	M28209	Homo sapiens GTP-binding protein (RAB1) mRNA, complete cds.	1e-053
2288	S57803	Ro60 protein gene [human, mRNA Partial, 176 nt, segment 1 of 2]	4e-054
2289	U01139	Mus musculus B6D2F1 clone 2C11B mRNA.	1e-054
2290	U72787	Homo sapiens cosmid clone U163C11 from Xp22.1-22.2, complete sequence [Homo sapiens]	1e-054
2291	M16553	Human tissue factor mRNA, complete cds, with an Alu repeat in the 3' untranslated region.	5e-055
2292	D10522	Homo sapiens mRNA for 80K-L protein, complete cds	5e-055
2293	Z71621	H.sapiens Wnt-13 mRNA	5e-055
2294	M81104	Human CD34 mRNA, complete cds.	4e-055
2295	D29805	Human mRNA for beta-1,4-galactosyltransferase, complete cds	2e-055
2296	X04299	Human mRNA for liver alcohol dehydrogenase (EC 1.1.1.1) gamma 2 subunit from ADH3 locus	2e-055
2297	U57715	Rattus norvegicus FGF receptor activating protein FRAG1 (FRAG1) mRNA, complete cds	2e-055
2298	NM_003150.1	Homo sapiens signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3) mRNA > :: gb|L29277|HUMAPRF Homo sapiens DNA-binding protein (APRF) mRNA, complete cds. > :: gb|I88780|I88780 Sequence 3 from patent US 5719042 > :: gb|I	2e-056
2299	X56974	M.musculus mRNA for external transcribed spacer	2e-057
2300	U62435	Human nicotinic acetylcholine receptor alpha6 subunit precursor, mRNA, complete cds	2e-057
2301	Z63454	H.sapiens CpG island DNA genomic Mse1 fragment, clone 84d2, reverse read cpg84d2.rt1a	6e-058
2302	U34994	Human DNA-dependent protein kinase catalytic subunit	6e-058
2303	Z60432	H.sapiens CpG island DNA genomic Mse1 fragment, clone 22h4, reverse read cpg22h4.rt1a	2e-058
2304	U83590	Rattus norvegicus PAR interacting protein mRNA, complete cds	2e-058
2305	U83590	Rattus norvegicus PAR interacting protein mRNA, complete cds	2e-058
2306	M28449	Mouse Hox-1.7 protein mRNA, 3' end.	8e-059
2307	M18981	Human prolactin receptor-associated protein	3e-059

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2308	NM_001866.1	Homo sapiens cytochrome c oxidase subunit VIIb (COX7B), nuclear gene encoding mitochondrial protein, mRNA > :: emb|Z14244|HSCOX7BM H.sapiens coxVIIb mRNA for cytochrome c oxidase subunit VIIb	2e-059
2309	NM_003295.1	Homo sapiens tumor protein, translationally-controlled 1 (TPT1) mRNA > :: emb|X16064|HSTUMP Human mRNA for translationally controlled tumor protein	2e-059
2310	D26067	Human mRNA for KIAA0033 gene, partial cds	9e-060
2311	NM_003130.1	Homo sapiens sorcin (SRI) mRNA > :: gb|M32886|HUMSRICPA Human sorcin CP-22 mRNA, complete cds.	9e-060
2312	X93334	H.sapiens mitochondrial DNA, complete genome	3e-060
2313	U12404	Human Csa-19 mRNA, complete cds.	2e-060
2314	AF070661	Homo sapiens HSPC005 mRNA, complete cds	1e-060
2315	U77665	Human RNaseP protein p30 (RPP30) mRNA, complete cds	1e-060
2316	L03558	Homo sapiens cystatin B mRNA, complete cds.	9e-061
2317	D14048	Rat mRNA for SP120, complete cds	3e-061
2318	NM_002450.1	Homo sapiens metallothionein 1L (MT1L) mRNA >	3e-061
2319	NM_001866.1	Homo sapiens cytochrome c oxidase subunit VIIb (COX7B), nuclear gene encoding mitochondrial protein, mRNA > :: emb|Z14244|HSCOX7BM H.sapiens coxVIIb mRNA for cytochrome c oxidase subunit VIIb	4e-062
2320	AC001443	Homo sapiens (subclone 2_f10 from BAC 2913	3e-062
2321	NM_002156.1	Homo sapiens heat shock 60kD protein 1 chaperonin (HSP60) mRNA, complete cds.	3e-062
2322	Z97207	Mus musculus mRNA for B-IND1 protein	3e-062
2323	J01415	Human mitochondrion, complete genome	1e-062
2324	D83735	Homo sapiens mRNA for neutral calponin, complete cds	4e-063
2325	NM_001866.1	Homo sapiens cytochrome c oxidase subunit VIIb (COX7B), nuclear gene encoding mitochondrial protein, mRNA > :: emb|Z14244|HSCOX7BM H.sapiens coxVIIb mRNA for cytochrome c oxidase subunit VIIb	4e-063
2326	X84694	H.sapiens mRNA for elongations factor Tu-mitochondrial	4e-063
2327	NM_001910.1	Homo sapiens cathepsin E (CTSE) mRNA > :: gb|J05036|HUMCTSE Human cathepsin E mRNA, complete cds.	4e-063

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2328	AF007775	Rattus norvegicus aquaporin-pancreas and liver	3e-063
2329	AF007775	Rattus norvegicus aquaporin-pancreas and liver	3e-063
2330	AF007862	Mus musculus mm-Mago mRNA, complete cds	3e-063
2331	D38112	Human mitochondrial DNA, complete sequence	1e-063
2332	NM_003002.1	Homo sapiens succinate dehydrogenase complex, subunit D, integral membrane protein (SDHD) mRNA > :: dbj|AB006202|AB006202 Homo sapiens mRNA for cytochrome b small subunit of complex II, complete cds	1e-063
2333	D38112	Human mitochondrial DNA, complete sequence	1e-063
2334	M12759	Human Ig J chain gene, exons 3 and 4.	1e-063
2335	U07802	Human Tis11d gene, complete cds.	1e-063
2336	D14659	Human mRNA for KIAA0103 gene, complete cds	1e-063
2337	U38253	Rattus norvegicus initiation factor eIF-2B gamma subunit (eIF-2B gamma) mRNA, complete cds	6e-064
2338	M22146	Human scar protein mRNA, complete cds.	5e-064
2339	L20681	Rat proto-oncogene (Ets-1) mRNA, complete cds.	4e-064
2340	M14292	Human L1Heg repetitive element from the intergenic region of the epsilon and G-gamma globin genes.	4e-064
2341	NM_003257.1	Homo sapiens tight junction protein 1 (zona occludens 1) (TJP1) mRNA > :: gb|L14837|HUMZO1A Human tight junction (zonula occludens) protein ZO-1 mRNA, complete cds.	4e-064
2342	NM_003002.1	Homo sapiens succinate dehydrogenase complex, subunit D, integral membrane protein (SDHD) mRNA > :: dbj|AB006202|AB006202 Homo sapiens mRNA for cytochrome b small subunit of complex II, complete cds	2e-064
2343	X12883	Human mRNA for cytokeratin 18	2e-064
2344	D42044	Human mRNA for KIAA0090 gene, partial cds	1e-064
2345	Z97207	Mus musculus mRNA for B-IND1 protein	1e-064
2346	X51867	H.sapiens MRP RNA gene encoding the RNA component of RNase MRP	7e-065
2347	X52104	Human mRNA for p68 protein	7e-065
2348	X74215	H.sapiens mRNA for Lon protease-like protein	6e-065
2349	U20796	Rattus norvegicus nuclear receptor Rev-ErbA-beta mRNA, partial cds.	5e-065
2350	X79201	H.sapiens mRNA for SYT	5e-065
2351	U34584	Human Bcl-2 interacting killer (BIK) mRNA, complete cds	5e-065

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2352	Z75894	Human DNA sequence from cosmid U61F10, between markers DXS366 and DXS87 on chromosome X contains ESTs	4e-065
2353	NM_002131.1	Homo sapiens high-mobility group (nonhistone chromosomal) protein isoforms I and Y (HMGIY) mRNA > :: emb|X14958|HSHMGY Human hmgI mRNA for high mobility group protein Y	2e-065
2354	AF007862	Mus musculus mm-Mago mRNA, complete cds	5e-068
2355	U74297	Oryctolagus cuniculus PiUS mRNA, complete cds	3e-069
2356	D11336	Sus scrofa mRNA for soluble angiotesin-binding protein, complete cds	2e-069
2357	AF007862	Mus musculus mm-Mago mRNA, complete cds	2e-069
2358	U74297	Oryctolagus cuniculus PiUS mRNA, complete cds	3e-071
2359	AF061260	Mus musculus immunosuperfamily protein B12 mRNA, complete cds	5e-073
2360	U92949	Mus musculus kinesin motor protein KIFC2 mRNA, complete cds	2e-077
2361	AF007775	Rattus norvegicus aquaporin-pancreas and liver	6e-079
2362	AF007775	Rattus norvegicus aquaporin-pancreas and liver	8e-082
2363	U63840	Rattus norvegicus nucleoporin p54 mRNA, complete cds	6e-085
2364	U57344	Mus musculus homeobox protein Meis3 mRNA, complete cds	1e-085
2365	Z11886	M.musculus notch-1 mRNA	5e-087
2366	AF007862	Mus musculus mm-Mago mRNA, complete cds	2e-089
2367	AF007862	Mus musculus mm-Mago mRNA, complete cds	1e-092
2368	Y11092	M.musculus mRNA for map kinase interacting kinase, Mnk2	2e-097
2369	L77991	Gallus gallus cyclin-dependent kinase (cdk6) gene, complete cds.	6e-098
2370	U42386	Mus musculus fibroblast growth factor inducible gene 14 (FIN14) mRNA, complete cds	e-163
2371	U42386	Mus musculus fibroblast growth factor inducible gene 14 (FIN14) mRNA, complete cds	e-160
2372	U42386	Mus musculus fibroblast growth factor inducible gene 14 (FIN14) mRNA, complete cds	e-144
2373	AJ000696	Rattus norvegicus mRNA for a novel kinesin-related protein, KIF1D	e-106
2374	AJ000696	Rattus norvegicus mRNA for a novel kinesin-related protein, KIF1D	e-101
2375	AJ000696	Rattus norvegicus mRNA for a novel kinesin-related protein, KIF1D	e-101
2376	Z97207	Mus musculus mRNA for B-IND1 protein	e-102

Table 2A Nearest Neighbor (BlastN vs. GenBank)

SEQ ID	ACCESSION	DESCRIPTION	P VALUE
2377	AJ000696	Rattus norvegicus mRNA for a novel kinesin-related protein, KIF1D	e-122
2378	AB000172	Porcine mRNA for endopeptidase 24.16, complete cds	e-118
2379	AB000171	Porcine mRNA for endopeptidase 24.16, complete cds	e-131
2380	U38253	Rattus norvegicus initiation factor eIF-2B gamma subunit (eIF-2B gamma) mRNA, complete cds	e-129
2381	X54352	M.domesticus MD6 mRNA	e-142
2382	X14678	Mouse TPA-induced TIS11 mRNA	e-121
2383	X82632	M.fascicularis mRNA for NAD+-isocitrate dehydrogenase	e-142
2384	U42385	Mus musculus fibroblast growth factor inducible gene 16 (FIN16) mRNA, complete cds	e-123
2385	U17901	Rattus norvegicus phospholipase A-2-activating protein (plap) mRNA, complete cds.	e-116
2386	U08215	Mus musculus Hsp70-related NST-1 (hsr.1) mRNA, complete cds.	e-119
2387	X82632	M.fascicularis mRNA for NAD+-isocitrate dehydrogenase	e-148
2388	U63840	Rattus norvegicus nucleoporin p54 mRNA, complete cds	e-131
2389	U42385	Mus musculus fibroblast growth factor inducible gene 16 (FIN16) mRNA, complete cds	e-145
2390	U42385	Mus musculus fibroblast growth factor inducible gene 16 (FIN16) mRNA, complete cds	e-149
2391	U81045	Cricetulus griseus aldo-keto reductase mRNA, complete cds	e-114
2392	L77991	Gallus gallus cyclin-dependent kinase (cdk6) gene, complete cds.	e-103
2393	U81045	Cricetulus griseus aldo-keto reductase mRNA, complete cds	e-115
2394	D30666	Rat mRNA for brain acyl-CoA synthetase II, complete cds	e-139
2395	U17901	Rattus norvegicus phospholipase A-2-activating protein (plap) mRNA, complete cds.	e-135
2396	D30666	Rat mRNA for brain acyl-CoA synthetase II, complete cds	e-126

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
63	3236249	(AC004684) hypothetical protein [Arabidopsis thaliana]	9.9
64	123111	H-2 CLASS II HISTOCOMPATIBILITY ANTIGEN, GAMMA CHAIN (HLA-DR ANTIGENS ASSOCIATED INVARIANT CHAIN) >gi|92086|pir||S04362 class II histocompatibility antigen-associated gamma chain, long splice form - rat >gi|56653|emb|CAA32468| (X14254) invariant chain (AA	9.7
65	94377	hypothetical protein 221 - turnip yellow mosaic virus	9.6
66	2736449	(AF039047) contains similarity to the BPTI/kunitz family of inhibitors [Caenorhabditis elegans]	9.5
67	543894	BETA-LACTAMASE PRECURSOR	8.2
68	3881525	(Z70038) cDNA EST EMBL:D32579 comes from this gene; cDNA EST EMBL:D35254 comes from this gene; cDNA EST yk224b3.5 comes from this gene; cDNA EST yk357f10.5 comes from this gene [Caenorhabditis elegans]	7.6
69	3128358	(AF010496) ribose transport system permease protein RbsC	7.5
70	3875771	(Z68297) Weak similarity to Mouse DNA-binding protein BMI 1 (SW:BMI1_MOUSE); cDNA EST EMBL:C07407 comes from this gene; cDNA EST EMBL:C07408 comes from this gene [Caenorhabditis elegans]	7.3
71	21293	(Y00759) 20 kDa protein (AA 1-212) [Spinacia oleracea]	7.3
72	2131007	(Z95890) pknE [Mycobacterium tuberculosis]	7.2
73	245923	(S83583) multiple-epitope polypeptide 1, MEP-1 construct]	7
74	115347	PROCOLLAGEN ALPHA 2(IV) CHAIN PRECURSOR >gi|84486|pir||S16366 collagen alpha 2(IV) chain precursor - pig roundworm >gi|159649 (M67507) putative [Ascaris suum]	6.9
75	2072674	(Z95120) rhlE [Mycobacterium tuberculosis]	5.8
76	807646	(M17294) unknown protein [Human herpesvirus 4]	5.8
77	131706	URIDINE 5'-MONOPHOSPHATE SYNTHASE OROTIDINE 5'-PHOSPHATE DECARBOXYLASE	5.6
78	631593	glucose transport protein homolog - sheep	5
79	854064	(X83413) U87 [Human herpesvirus 6]	4.8
80	484695	vascular cell adhesion molecule 1 - human	4.2
81	1236146	(U49864) fus1 protein [Chlamydomonas reinhardtii]	3.8
82	1083846	acetyl-CoA carboxylase (EC 6.4.1.2) - Cyclotella cryptica >gi|409450 (L20784) acetyl-CoA carboxylase [Cyclotella cryptica]	3.5
83	2245054	(Z97342) protein kinase homolog	3.4

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
84	1717863	UBIQUITIN-CONJUGATING ENZYME E2-21.2 KD (UBIQUITIN-PROTEIN LIGASE) (UBIQUITIN CARRIER PROTEIN) >gi|1077331|pir||S51438 probable membrane protein YLR306w - yeast (Saccharomyces cerevisiae) cerevisiae]	3.4
85	1363331	transcription factor IIIC alpha chain - rat alpha-subunit [Rattus norvegicus]	3.4
86	2736327	(AF038615) No definition line found [Caenorhabditis elegans]	3.1
87	4587895	(AF072509) glutamate receptor interacting protein 2 [Rattus norvegicus]	3.1
88	1480746	(U62529) matrix metalloproteinase 3 [Equus caballus]	3
89	225858	thyroid/steroid receptor related gene [Homo sapiens]	3
90	3861293	(AJ235273) 3-OXOACYL-[ACYL-CARRIER-PROTEIN] SYNTHASE II (fabF)	2.4
91	103812	hypothetical protein 1 - zebra fish	2
92	3256583	(AP000001) 361aa long hypothetical protein [Pyrococcus horikoshii]	1.7
93	1684985	(U20633) NADH dehydrogenase subunit [Neuwiedia veratrifolia]	1.5
94	452517	(D26361) KIAA0042 [Homo sapiens]	1.4
95	4218558	(AJ011500) gra-orf26 [Streptomyces violaceoruber]	1.1
96	4539280	(AL049498) putative transcription factor	0.28
97	4539280	(AL049498) putative transcription factor	0.26
98	3881842	(Z78201) Similarity to E.coli 2-oxoglutarate dehydrogenase (SW:ODO1_ECOLI); cDNA EST EMBL:D32590 comes from this gene; cDNA EST EMBL:D32841 comes from this gene; cDNA EST EMBL:D34051 comes from this gene; cDNA EST EMBL:D35268 c...	4e-019
99	4102877	(AF017152) Shc binding protein [Mus musculus]	6e-050
100	3327062	(AB014524) KIAA0624 protein [Homo sapiens]	5e-050
102	3126979	(AF062483) SDP3 [Homo sapiens]	6.1
103	3930776	(AF099149) TRIAD1 type I [Homo sapiens]	9e-068
106	2708741	(AC003952) hypothetical protein [Arabidopsis thaliana]	3.6
107	733554	(U23450) similar to RNA-binding protein [Caenorhabditis elegans]	1e-014
108	3851703	(AF100421) p80 [Rattus norvegicus]	7e-055
112	2120729	GumG protein - Xanthomonas campestris	6
120	3334526	(AL021306) predicted using FGENEH [Homo sapiens]	7.7
121	2407956	(X87612) mono ATP-ribosaltransferase [Mus musculus]	5.9

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
122	3877701	(Z69662) predicted using Genefinder; similar to collagen; cDNA EST EMBL:D75049 comes from this gene; cDNA EST EMBL:D72067 comes from this gene; cDNA EST EMBL:D72223 comes from this gene; cDNA EST EMBL:D72768 comes from this gen...	5.9
123	2117780	serine/threonine protein kinase - quail	3.5
124	1722738	MINOR CAPSID PROTEIN L2 >gi|1020224 type 36]	3.4
125	2494448	HYPOTHETICAL PROTEIN MJ0208 Methanococcus jannaschii >gi|1498983 (U67476) 4Fe-4S iron-sulfur protein [Methanococcus jannaschii]	3.4
126	2494294	NEUROGENIC LOCUS NOTCH 3 PROTEIN	3.4
127	4493971	(AL034559) predicted using hexExon; MAL3P7.11 (PFC0910w), Hypothetical protein, len: 430 aa	0.61
138	3025005	HYPOTHETICAL 28.8 KD PROTEIN IN MOAE-RHLE INTERGENIC REGION >gi|1787008 (AE000181) orf, hypothetical protein [Escherichia coli]	9.8
139	3881856	(Z79759) Similarity to Yeast endosomal P24A protein (SW:EM70_YEAST); cDNA EST CEMSB40F comes from this gene; cDNA EST EMBL:C13538 comes from this gene; cDNA EST yk385b5.5 comes from this gene	9.6
140	1945493	(U56965) Similar to NAD(P) transhydrogenase, mitochondrial; coded for by C. elegans cDNA yk27c1.5; coded for by C. elegans cDNA yk35b9.5; coded for by C. elegans cDNA yk35b9.3; coded for by C. elegans cDNA yk161c9.3; coded for by C. elegans ...	5.6
141	3746071	(AC005311) putative GTP-binding protein [Arabidopsis thaliana]	5.6
142	2088843	(AF003386) F59E12.9 gene product [Caenorhabditis elegans]	3.2
143	1706551	GLUCAN ENDO-1,3-BETA-GLUCOSIDASE PRECURSOR ((1->3)-BETA-GLUCAN ENDOHYDROLASE) aestivum]	1.9
144	629778	chitinase (EC 3 2.1.14) - barley vulgare]	1.9
145	2791276	(Z95327) Cleavage Stimulation Factor sapiens]	0.85
146	736767	helper component protease [Turnip mosaic virus]	0.5
147	1731209	HYPOTHETICAL 35.4 KD PROTEIN CY20G9.19C >gi|1449291|emb|CAB00954| (Z77162) hypothetical protein Rv0493c [Mycobacterium tuberculosis]	0.22
148	3877063	(Z37092) F44F4.10 [Caenorhabditis elegans]	0.075
149	3878739	(Z73428) similar to Zinc finger, C3HC4 type (RING finger); cDNA EST EMBL:D67323 comes from this gene [Caenorhabditis elegans] >gi|3881096|emb|CAB16481| finger); cDNA EST EMBL:D67323 comes from this gene	2e-029

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
159	4454483	(AC006234) putative kinase, 5' partial	9.1
160	3044086	(AF055904) unknown [Myxococcus xanthus]	5.4
161	1945493	(U56965) Similar to NAD(P) transhydrogenase, mitochondrial; coded for by C. elegans cDNA yk27c1.5; coded for by C. elegans cDNA yk35b9.5; coded for by C. elegans cDNA yk35b9.3; coded for by C. elegans cDNA yk161c9.3; coded for by C. elegans ...	5.4
162	730883	SYNAPTIC VESICLE PROTEIN 2 (SV2) norvegicus]	5.4
163	2351212	(D88386) gag-pol polyprotein (precursor protein) [Friend murine leukemia virus]	4.2
164	1722738	MINOR CAPSID PROTEIN L2 >gi|1020224 type 36]	3.2
165	4115922	(AF118222) contains similarity to ubiquitin carboxyl-terminal hydrolase family 2 (Pfam:PF00443, score=48.3, E=3.5e-13, N=2) and (Pfam:PF00442, Score=40.0 E=5.2e-08, N=1) [Arabidopsis thaliana]	2.4
166	1351639	VERY HYPOTHETICAL 52.7 KD PROTEIN C8A4.05C IN CHROMOSOME I >gi|2130446|pir||S62521 hypothetical protein SPAC8A4.05c - fission yeast	2.4
167	4506857	small inducible cytokine subfamily D (Cys-X3-Cys), member 1 (fractalkine, neurotactin) >gi|1888523 (U84487) CX3C chemokine precursor [Homo sapiens] >gi|1899259 (U91835) CX3C chemokine precursor [Homo sapiens] >gi|3252821	2.4
168	4505637	protocadherin 8; PCDH8 sapiens]	1.9
169	3249055	(AF071210) casein kinase II alpha subunit [Spodoptera frugiperda]	1.4
170	854065	(X83413) U88 [Human herpesvirus 6]	1e-005
171	854065	(X83413) U88 [Human herpesvirus 6]	1e-005
191	3150072	(AF046996) preS1 surface protein [woolly monkey hepatitis B Virus]	6.9
192	2622845	(AE000928) corrinoid/iron-sulfur protein, large subunit	6.9
193	1083554	tyrosine phosphoprotein SLP-76 - mouse	6.9
194	1708868	LOW-DENSITY LIPOPROTEIN RECEPTOR-RELATED PROTEIN PRECURSOR (LRP) Caenorhabditis elegans >gi|156360 (M96150) LDL receptor-related protein [Caenorhabditis elegans] Genefinder; Identity to C.elegans Low density lipid (LDL) receptor-related protein (TR:G15636	5.2
195	3169030	(AL023702) putative insertion element IS1647 transposase [Streptomyces coelicolor]	4
196	728835	!!!! ALU SUBFAMILY SC WARNING ENTRY	4
197	484695	vascular cell adhesion molecule 1 - human	3.9

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
198	2204102	(Y13898) glutathione-S-transferase	3.9
199	1118071	(U41554) coded for by C. elegans cDNA yk38a7.3; coded for by C. elegans cDNA yk8c6.3; coded for by C. elegans cDNA yk25d12.5; coded for by C. elegans cDNA yk25d12.3; coded for by C. elegans cDNA yk8c6.5; coded for by C. elegans cDNA yk7f8.5;...	2.3
200	799146	(U24495) 2a protein [Broad bean mottle virus]	1.4
201	73416	E2 protein - human papillomavirus type 18 papillomavirus type 18]	1.4
202	294529	(L14933) convertase PC5 [Rattus norvegicus]	0.45
203	124141	TRANS-ACTING TRANSCRIPTIONAL PROTEIN ICP4 (TRANSCRIPTIONAL ACTIVATOR IE175) (ALPHA-4 PROTEIN) human herpesvirus 1 >gi|59558|emb|CAA32286| (X14112) RS1 RS1 [human herpesvirus 1] >gi|59849|emb|CAA29763| 1298) [human herpesvirus 1] >gi|291491|gb|AAA96675.1|	0.031
204	4503511	UNKNOWN >gi|3264861 (U97670) eukaryotic translation initiation factor eIF3, p35 subunit [Homo sapiens]	3e-010
205	4503511	UNKNOWN >gi|3264861 (U97670) eukaryotic translation initiation factor eIF3, p35 subunit [Homo sapiens]	3e-010
206	3298605	(AF057365) UDP N-acetylglucosamine transporter [Canis familiaris]	8e-033
221	3116148	(AL023290) putative ATP-dependent RNA helicase [Schizosaccharomyces pombe]	8.7
222	4544400	(AC007047) hypothetical protein [Arabidopsis thaliana]	8.7
223	1086982	E1 replication protein [bovine papillomavirus type 1 BPV-1, Peptide, 605 aa]	8.6
224	1762434	(U59924) nitric oxide synthase [Sus scrofa]	8.6
225	731689	HYPOTHETICAL 433.2 KD PROTEIN IN HXT5-NRK1 INTERGENIC REGION >gi|626646|pir||S46715 hypothetical protein YHR099w - yeast (Saccharomyces cerevisiae) >gi|487929 (U00060) Tra1p [Saccharomyces cerevisiae]	8.5
226	2351132	(D85200) S glycoprotein [Brassica oleracea]	8.5
227	1762434	(U59924) nitric oxide synthase [Sus scrofa]	8.5
228	4493995	(AL034559) predicted using hexExon; MAL3P7.47 (PFC1080c), Hypothetical protein, len: 232 aa	6.7
229	462685	NUCLEOCAPSID PROTEIN coronavirus (strain K378) >gi|58850|emb|CAA47246|	5.2
230	4519268	(AB024314) CREA [Aspergillus aculeatus]	5

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
231	1364138	probable polymerase - soybean dwarf virus polymerase [Soybean dwarf virus]	5
232	1709938	ADENYLOSUCCINATE SYNTHETASE adenylosuccinate synthase (EC 6.3.4.4) - Thiobacillus ferrooxidans >gi|48168|emb|CAA40593| (X57324) purA adenylosuccinate synthetase [Thiobacillus ferrooxidans]	3.8
233	1947132	(AF000262) the second exon has similarity to collagen alpha in a glycine- and proline-rich region	2.9
234	2245054	(Z97342) protein kinase homolog	2.9
235	2736517	(AF039052) contains similarity to helicases	1.7
236	1620170	(U42580) a499L [Paramecium bursaria Chlorella virus 1]	1.7
237	4336718	(AF104031) caudal-related homeobox protein	1.3
238	114969	BETA-GLUCOSIDASE A (GENTIOBIASE) 3.2.1.21) - Caldocellum saccharolyticum 1-455) [Caldicellulosiruptor saccharolyticus]	0.76
239	1170313	HOMEOBOX PROTEIN CDX-1 (CAUDAL-TYPE HOMEOBOX PROTEIN 1) >gi|1083361|pir||A49303 homeotic protein Cdx-1 - mouse	0.44
258	1172222	(U44834) polyphosphate glucokinase [Mycobacterium tuberculosis] >gi|1588398|prf||2208389A phosphate glucokinase [Mycobacterium bovis]	8.4
259	2959862	(AJ002303) synaptogyrin 1c [Homo sapiens]	8.1
260	2983552	(AE000721) cation efflux system (czcD-like) [Aquifex aeolicus]	8
261	104800	nicotinic acetylcholine receptor alpha-5 chain precursor - chicken	4.8
262	3875957	(Z78013) predicted using Genefinder; cDNA EST EMBL:D72806 comes from this gene; cDNA EST EMBL:D75743 comes from this gene; cDNA EST yk417b6.3 comes from this gene; cDNA EST yk417b6.5 comes from this gene; cDNA EST yk276c6.3 com...	4.8
263	746475	(U23511) No definition line found [Caenorhabditis elegans]	4.7
264	1899232	(U90333) aquarius gene product [Mus musculus]	2.8
265	3123186	AFLATOXIN BIOSYNTHESIS REGULATORY PROTEIN	2.8
266	2500589	NUCLEOLYSIN TIAR (TIA-1 RELATED PROTEIN) >gi|1592563 (U55861) RNA binding protein TIAR	2.8
267	90253	leukocyte common antigen precursor - mouse musculus]	1.7
268	2827553	(AL021635) predicted protein [Arabidopsis thaliana]	1.6
269	3695397	(AF096372) No definition line found [Arabidopsis thaliana]	0.42
270	2564330	(AB006629) KIAA0291 [Homo sapiens]	8e-006

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
271	3413860	(AB007918) KIAA0449 protein [Homo sapiens]	3e-009
272	4454698	(AF070661) HSPC005 [Homo sapiens]	1e-010
289	266328	PROBABLE PROCESSING AND TRANSPORT PROTEIN (INFECTED CELL PROTEIN 18.5) murine cytomegalovirus (strain Smith) cytomegalovirus 1]	6
290	2204102	(Y13898) glutathione-S-transferase	3.5
291	2887280	(AJ002140) DNA	3.5
292	4567223	(AC007119) hypothetical protein	3.1
303	2077849	(AB003348) E1 protein [Rubella virus]	9.9
304	845311	(L40021) polyprotein [Feline calicivirus]	7.3
305	266328	PROBABLE PROCESSING AND TRANSPORT PROTEIN (INFECTED CELL PROTEIN 18.5) murine cytomegalovirus (strain Smith) cytomegalovirus 1]	5.6
306	103469	homeotic protein bicoid - fruit fly pseudoobscura]	5.6
307	2204102	(Y13898) glutathione-S-transferase	3.3
308	125394	HOMOSERINE KINASE (HK) Pseudomonas aeruginosa >gi|45425|emb|CAA46169| (X65034) homoserine kinase [Pseudomonas aeruginosa]	3.3
309	2353163	(AF015560) RO11 [Neurospora crassa]	0.66
310	484695	vascular cell adhesion molecule 1 - human	0.64
311	3874146	(Z72502) Similarity with proline-rich proteoglycan (PIR accession number B48013); cDNA EST EMBL:D66054 comes from this gene; cDNA EST EMBL:D69700 comes from this gene; cDNA EST yk446b10.3 comes from this gene; cDNA EST yk446b10..	0.52
312	117589	CIRCUMSPOROZOITE PROTEIN PRECURSOR precursor - Plasmodium knowlesi (strain Nuri) >gi|160198	9e-005
313	2781381	(AC004013) Similar to rabbit A-kinase-anchoring protein sapiens]	1e-019
317	730269	PAN1 PROTEIN >gi|626783|pir||S48440 poly(A)-specific ribonuclease (EC 3.1.13.4) - yeast PAN1_YEAST P32521 PAB-DEPENDENT POLY(A)-SPECIFIC RIBONONUCLEASE but differences with this sequence	7.2
318	3201610	(AC004669) unknown protein [Arabidopsis thaliana]	5.4
319	3129975	(AL023516) Complement C4 [Gallus gallus]	2.4
322	1850592	(U88295) carnitine palmitoyltransferase II [Rattus norvegicus]	6.9
323	3881650	(Z70757) Weak similarity to the XFIN protein (Swiss Prot accession number P08045)	6.6
324	2653998	(AF032884) tnsC [Thiobacillus ferrooxidans]	8.2
326	145111	(M18083) periplasmic [NiFe]hydrogenase protein small subunit precursor [Desulfovibrio gigas]	0.37
327	2244839	(Z97337) hypothetical protein [Arabidopsis thaliana]	3.1

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
328	3935180	(AC004557) F17L21.23 [Arabidopsis thaliana]	4.6
332	3328899	(AE001320) hypothetical protein [Chlamydia trachomatis]	7.4
333	4096264	(U26528) Ig heavy chain [Oryctolagus cuniculus]	7.1
334	3023209	168 KD SURFACE-LAYER PROTEIN PRECURSOR [CONTAINS: 120 KD SURFACE-EXPOSED PROTEIN MEMBRANE PROTEIN OMPB); 32 KD BETA PEPTIDE] precursor - Rickettsia typhi >gi|1871223 (L04661) crystalline surface layer protein [Rickettsia typhi]	5.8
335	4589400	(AB009958) polyprotein [satsuma dwarf virus]	5.7
336	1709356	SODIUM-DEPENDENT NORADRENALINE TRANSPORTER (NOREPINEPHRINE TRANSPORTER) (NET) bovine >gi|1050439|emb|CAA55645| (X79015) norepinephrine transporter [Bos taurus]	5.4
337	4512671	(AC006931) unknown protein [Arabidopsis thaliana]	1.9
343	3757516	(AC005167) putative TMV resistance protein [Arabidopsis thaliana]	3.8
344	586480	HYPOTHETICAL 62.6 KD PROTEIN IN CDS1-RPL2 INTERGENIC REGION >gi|626496|pir||S45886 hypothetical protein YBR030w - yeast (Saccharomyces cerevisiae) >gi|498758|emb|CAA53686| (X76078) YBR0314 cerevisiae]	0.26
345	423981	88K E-26-specific domain protein Pok - Drosophila >gi|217342|dbj BAA01080| (D10228) Ets domain protein [Drosophila melanogaster]	0.054
347	1653153	(D90911) acriflavin resistance protein	5.5
348	2147342	E4 protein - human papillomavirus type 14D	0.67
349	3914412	GENOME POLYPROTEIN [CONTAINS: N-TERMINAL PROTEIN (P1); HELPER COMPONENT PROTEINASE INCLUSION PROTEIN (CI); 6 KD PROTEIN 2 (6K2); GENOME-LINKED PROTEIN (VPG); NUCLEA... mosaic virus]	0.95
350	2997741	(AF054838) tetraspan TM4SF; Tspan-1 [Homo sapiens]	1e-017
351	1086900	(U41278) contains similarity to G beta repeats	3e-027
372	129036	2-OXOGLUTARATE DEHYDROGENASE E1 COMPONENT (ALPHA-KETOGLUTARATE DEHYDROGENASE) dehydrogenase [Azotobacter vinelandii]	9.8
373	2120777	cellulose synthase - Agrobacterium tumefaciens >gi|710493 (L38609) cellulose synthase celA gene [Agrobacterium tumefaciens]	9.7
374	628527	hypothetical protein - Pseudomonas syringae syringae]	9.6

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
375	123395	HOMEOBOX PROTEIN NK-1 (S59/2) fly (Drosophila melanogaster) >gi|8531|emb|CAA39067| sp.]	7.8
376	3722000	(AF035323) survival motor neuron protein	7.8
377	3881030	(AL021493) Y51A2B.2 [Caenorhabditis elegans]	7.4
378	4505777	PHD finger protein 1 >gi|2660720 1) [Homo sapiens]	6
379	2190501	(X53706) immunoglobulin alpha-2 heavy chain [Pan troglodytes]	5.8
380	2688643	(AE001171) conserved hypothetical integral membrane protein [Borrelia burgdorferi]	5.7
381	1086832	(U41264) coded for by C. elegans cDNA cm13g1; Similar to bumetanide-sensitive Na-K-Cl cotransporter.	5.4
382	1931639	(U95973) lysophospholipase isolog [Arabidopsis thaliana]	4.6
383	3757516	(AC005167) putative TMV resistance protein [Arabidopsis thaliana]	4.5
384	4504567	interferon consensus sequence binding protein 1 >gi|2275153 (M91196) DNA-binding protein [Homo sapiens]	4.4
385	464822	SUR1 PROTEIN >gi|542362|pir||S41798 SUR1 protein - yeast (Saccharomyces cerevisiae) cerevisiae] >gi|976268|dbj BAA05628| (D26581) Bcl21p	4.4
386	3023738	EXOSTOSIN-L (MULTIPLE EXOSTOSIS-LIKE PROTEIN) >gi|1524413 (U67191) multiple exostosis-like protein [Homo sapiens] >gi|4106426	4.3
387	3878603	(Z83116) M01B2.3 [Caenorhabditis elegans]	3.4
388	3745858	(L33180) BRO-a [Bombyx mori nuclear polyhedrosis virus]	3.3
389	4321758	(AF060669) polyprotein [Hepatitis E virus]	3.3
390	2661037	(AF035285) dihydroxyacetone phosphate acyltransferase	3.3
391	2950355	(AJ223300) homebox protein DRx [Drosophila melanogaster]	2.7
392	3821973	(AF061140) merozoite surface protein 1 [Plasmodium falciparum]	2.5
393	1552187	(D84375) ORF3 [Oryzias latipes]	2
394	2493417	S100 CALCIUM-BINDING PROTEIN A13 calcium-binding protein A13 [Mus musculus]	1.6
395	3550082	(AF071186) WW domain binding protein 11 [Mus musculus]	1.5
396	1082665	oligodendrocyte-specific proline-rich protein 2 - human >gi|1408050|dbj|BAA05660| (D28114) MOBP [Homo sapiens]	1.5

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
397	3874925	(Z68296) Similarity to Mouse A-RAF proto-oncogene serine/threonine-protein kinase gene; cDNA EST EMBL:T01018 comes from this gene; cDNA EST EMBL:D33256 comes from this gene;...	1.2
398	2500886	PROBABLE SIGNAL RECOGNITION 54 KD PROTEIN (SRP54) >gi|2129283|pir||E64312 signal recognition particle protein - Methanococcus jannaschii subunit SRP54 [Methanococcus jannaschii]	1.2
399	2291241	(AF016428) contains similarity to Vaccinia virus 37 kd envelope protein [Caenorhabditis elegans]	1.1
400	309958	(L06798) class D tetracycline/H+ antiporter [Plasmid pRA1] >gi|575937|dbj|BAA03719| (D16172) PP-TETA protein	0.91
401	3877379	(Z46267) F49E2.2 [Caenorhabditis elegans]	0.39
402	4539280	(AL049498) putative transcription factor	0.29
403	3293235	(U96413) putative opine synthase [Agrobacterium tumefaciens]	0.097
404	3329636	(AF078786) No definition line found [Caenorhabditis elegans]	0.003
405	3947614	(AL023828) cDNA EST yk491f8.5 comes from this gene [Caenorhabditis elegans]	8e-019
406	3947614	(AL023828) cDNA EST yk491f8.5 comes from this gene [Caenorhabditis elegans]	1e-019
407	3880930	(AL021481) similar to Phosphoglucomutase and phosphomannomutase phosphoserine; cDNA EST EMBL:D36168 comes from this gene; cDNA EST EMBL:D70697 comes from this gene; cDNA EST yk373h9.5 comes from this gene; cDNA EST EMBL:T00805 ...	1e-022
408	3184082	(AL023781) N-terminal acetyltransferase 1	1e-028
409	2500558	PUTATIVE RIBONUCLEASE III (RNASE III) >gi|3876420|emb|CAB03005| (Z81070) similar to ribonuclease [Caenorhabditis elegans]	7e-030
410	3877493	(Z48583) similar to ATPases associated with various cellular activities (AAA); cDNA EST EMBL:Z14623 comes from this gene; cDNA EST EMBL:D75090 comes from this gene; cDNA EST EMBL:D72255 comes from this gene; cDNA EST yk200e4.5 ...	5e-044
411	3298605	(AF057365) UDP N-acetylglucosamine transporter [Canis familiaris]	1e-051
412	4103604	(AF026031) putative mitochondrial outer membrane protein import receptor [Homo sapiens]	1e-059

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
413	2662165	(AB007902) HH0712 cDNA clone for KIAA0442 has a 574-bp insertion at position 1474 of the sequence of KIAA0442. [Homo sapiens]	4e-070
414	3882145	(AB018255) KIAA0712 protein [Homo sapiens]	9e-072
477	117552	CHAPERONE PROTEIN CS3-1 PRECURSOR Escherichia coli >gi|41156|emb|CAA34815| (X16944) 27kD protein (AA 1 to 241) [Escherichia coli]	9.3
478	2983622	(AE000726) hypothetical protein [Aquifex aeolicus]	9.3
479	2088694	(AF003135) W03F11.1 gene product [Caenorhabditis elegans]	9.3
480	4240237	(AB020681) KIAA0874 protein [Homo sapiens]	9.2
481	1864073	(U63002) T-cell receptor beta chain [Callithrix jacchus]	9
482	2147334	DNA helicase II 70K chain homolog - Rhipicephalus appendiculatus >gi|1063592 (L41356) ku autoantigen p70 homologue [Rhipicephalus appendiculatus]	8.9
483	3323145	(AE001253) T. pallidum predicted coding region TP0827	8.7
484	2183251	(AF002227) putative polyprotein [border disease virus strain C413]	8.6
485	3875768	(Z92830) cDNA EST yk223c7.5 comes from this gene; cDNA EST yk307b2.5 comes from this gene; cDNA EST yk377h2.5 comes from this gene; cDNA EST yk223c7.3 comes from this gene; cDNA EST yk307b2.3 comes from this gene [Caenorhabditi... >gi|3876216|emb|CAB07594	8.6
486	1351589	HYPOTHETICAL PROTEIN MG456 Mycoplasma genitalium (SGC3) >gi|1046175 (U39732) M. genitalium predicted coding region MG456 [Mycoplasma genitalium] >gi|3845050 (U39727) conserved hypothetical protein [Mycoplasma genitalium]	8.4
487	3023800	GLUCOSE-6-PHOSPHATASE (G6PASE) familiaris]	6.9
488	450722	(X71982) ORF j11R [African swine fever virus]	6.8
489	2633756	(Z99111) similar to heavy metal-transporting ATPase [Bacillus subtilis]	6.6
490	4049887	(AF063866) ORF MSV024 ALI motif gene family protein	6.5
491	1363994	abdominal-A homeodomain protein - Junonia coenia >gi|797277 (L41931) abdominal-A homeodomain protein [Junonia coenia]	5.3
492	2370493	(Z98944) hypothetical protein	5.3
493	140631	HYPOTHETICAL 25.9 KD PROTEIN FP25.9 [Fowlpox virus]	5.3
494	400927	RIBONUCLEOPROTEIN RB97D ribonucleoprotein [Drosophila melanogaster]	5.1
495	2462935	(Y12321) open reading frame 1 [Brassica oleracea]	5

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
496	2160189	(AC000132) Similar to A. thaliana receptor-like protein kinase (gb|RLK5_ARATH). ESTs gb|ATTS0475,gb|ATTS4362 come from this gene. [Arabidopsis thaliana]	5
497	1850972	(U84144) putative fimbrial chaperone [Escherichia coli]	4.9
498	2145678	B1549_C3_230 protein - Mycobacterium leprae	4.2
499	3182952	CGMP-INHIBITED 3',5'-CYCLIC PHOSPHODIESTERASE A (CYCLIC GMP INHIBITED PHOSPHODIESTERASE A) (CGI-PDE A) >gi|1145304 (U38179) cyclic nucleotide phosphodiesterase [Rattus norvegicus]	4.2
500	4493738	(AL034358) predicted using hexExon; L4830.1, Hypothetical protein, len: 1107 [Leishmania major]	4.2
501	730336	PUTATIVE POLYKETIDE SYNTHASE PKSL 2.3.1.-) - Bacillus subtilis >gi|40058|emb|CAA78479| subtilis] >gi|528996 (U11039) polyketide synthase polyketide synthase of type I [Bacillus subtilis]	4.2
502	188908	(M19720) L-myc protein [Homo sapiens]	4
503	4056436	(AC005990) EST gb|AA650912 comes from this gene.	3.9
504	3874349	(Z81035) predicted using Genefinder; Similarity to Sheep vasopressin V1A receptor (SW:P48043)	3.9
505	3874067	(Z93374) similar to 7TM receptor elegans]	3.9
506	3979818	(Z49967) cDNA EST EMBL:T00743 comes from this gene; cDNA EST EMBL:D69356 comes from this gene; cDNA EST EMBL:D65790 comes from this gene; cDNA EST EMBL:D70463 comes from this gene; cDNA EST EMBL:D66620 comes from this gene; cDN...	3.2
507	119462	ENVELOPE POLYPROTEIN GP160 PRECURSOR 2] >gi|225570|prf||1306388H gene env [Human immunodeficiency virus type 2]	3.2
508	117657	COLICIN V PRODUCTION PROTEIN (DEDE PROTEIN) (PUR REGULON 18 KD PROTEIN) colicin V production [Escherichia coli] dedE protein [Escherichia coli]	3.1
509	114441	ATP SYNTHASE A CHAIN (PROTEIN 6) 3.6.1.34) protein 6 - fruit fly (Drosophila yakuba) mitochondrion (SGC4) >gi|12921|emb|CAA25442| (X00924) ATPase subunit 6 [Drosophila yakuba]	3
510	1280094	(U55369) No definition line found [Caenorhabditis elegans]	3
511	226131	thyroid hormone receptor alpha 2 [Rattus norvegicus]	3

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
512	3860855	(AJ235271) GUANOSINE PENTAPHOSPHATE PHOSPHOHYDROLASE (gppA) [Rickettsia prowazekii]	2.9
513	584834	CELLULOSE SYNTHASE OPERON C PROTEIN xylinus] >gi|1090660|prf||2019362C acsC gene	2.4
514	629777	chitinase (EC 3.2.1.14) - barley vulgare]	2.2
515	2555183	(AF026504) SPA-1 like protein p1294 [Rattus norvegicus]	2.2
516	4503737	forkhead (Drosophila) homolog 1 HEAD DOMAIN PROTEIN FKHR >gi|631145|pir||S40521 FKHR protein - human >gi|435423 (U02310) fork head domain protein [Homo sapiens] >gi|737918|prf||1923399A FKHR gene [Homo sapiens]	1.8
517	3790719	(AF099916) contains similarity to C2H2-type zinc fingers	1.8
518	1785942	(U83412) CAG [Drosophila melanogaster]	1.8
519	3877036	(Z81079) predicted using Genefinder; similar to collagen; cDNA EST EMBL:M88890 comes from this gene; cDNA EST EMBL:Z14325 comes from this gene; cDNA EST EMBL:D27520 comes from this gene; cDNA EST EMBL:D72240 comes from this gen...	1.4
520	281654	hypothetical protein 24 - Agrobacterium tumefaciens plasmid pTi15955 >gi|39086|emb|CAA25186| tumefaciens]	1.3
521	114972	BETA-GLUCOSIDASE (GENTIOBIASE) Ruminococcus albus >gi|45968|emb|CAA33461| (X15415) beta-glucosidase (AA 1 - 947) [Ruminococcus albus] albus]	1.3
522	1707085	(U80451) Similar to collagen [Caenorhabditis elegans]	1.3
523	483163	nonstructural protein - hepatitis E virus RNA-directed RNA polymerase [Hepatitis E virus]	1.3
524	4455275	(AL035527) putative protein [Arabidopsis thaliana]	0.99
525	4376875	(AE001642) CT465 hypothetical protein	0.45
526	2494911	HYPOTHETICAL PROTEIN KIAA0124 product is novel. [Homo sapiens]	0.44
527	4539280	(AL049498) putative transcription factor	0.28
528	1842255	(U74613) hepatocyte nuclear factor-3/fork head homolog 11B [Homo sapiens]	0.28
529	231977	D(4) DOPAMINE RECEPTOR (D(2C) DOPAMINE RECEPTOR) >gi|203916 (M84009) dopamine receptor D4	0.073
530	987050	(X65335) lacZ [Cloning vector pSV-beta-Galactosidase Control]	0.042
531	2493416	S100 CALCIUM-BINDING PROTEIN A13 calcium-binding protein A13 (S100A13) [Homo sapiens]	0.031

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
532	1778844	(U83086) LimA [Dictyostelium discoideum]	0.0006
533	3288470	(AJ224360) surf5c [Homo sapiens]	5e-015
534	3947614	(AL023828) cDNA EST yk491f8.5 comes from this gene [Caenorhabditis elegans]	1e-015
535	1086860	(U41272) Similar to man(9)-alpha-mannosidase.	3e-028
536	3875451	(Z66496) cDNA EST EMBL:D71941 comes from this gene; cDNA EST EMBL:D74691 comes from this gene; cDNA EST EMBL:D76330 comes from this gene; cDNA EST EMBL:D65192 comes from this gene; cDNA EST EMBL:D68540 comes from this gene; cDN...	2e-030
537	3877493	(Z48583) similar to ATPases associated with various cellular activities (AAA); cDNA EST EMBL:Z14623 comes from this gene; cDNA EST EMBL:D75090 comes from this gene; cDNA EST EMBL:D72255 comes from this gene; cDNA EST yk200e4.5 ...	1e-035
538	3169010	(AJ006412) putative GTP-binding protein	2e-042
539	3877493	(Z48583) similar to ATPases associated with various cellular activities (AAA); cDNA EST EMBL:Z14623 comes from this gene; cDNA EST EMBL:D75090 comes from this gene; cDNA EST EMBL:D72255 comes from this gene; cDNA EST yk200e4.5 ...	4e-044
540	3877493	(Z48583) similar to ATPases associated with various cellular activities (AAA); cDNA EST EMBL:Z14623 comes from this gene; cDNA EST EMBL:D75090 comes from this gene; cDNA EST EMBL:D72255 comes from this gene; cDNA EST yk200e4.5 ...	3e-044
608	3882189	(AB018277) KIAA0734 protein [Homo sapiens]	9.9
609	3877937	(Z48716) similarity to a transmembranous region of ubiquinol-cytochrome-C reductase (PIR accession number S38960); cDNA EST EMBL:T00461 comes from this gene; cDNA EST EMBL:D27071 comes from this gene; cDNA EST EMBL:D27070 comes... transmembranous region o	9.6
610	3643019	(AF064703) glucose transporter 1; CeGT1 [Drosophila melanogaster]	8.4
611	3219946	HYPOTHETICAL PROTEIN MJ1394 Methanococcus jannaschii >gi|1592041 (U67579) conserved hypothetical protein [Methanococcus jannaschii]	8
612	3219946	HYPOTHETICAL PROTEIN MJ1394 Methanococcus jannaschii >gi|1592041 (U67579) conserved hypothetical protein [Methanococcus jannaschii]	8
613	2833328	FIBRILLARIN	7.9

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
614	4505481	nucleoporin 88kD complex protein [Homo sapiens]	7.8
615	220578	(D00570) open reading frame (251 AA) [Mus musculus]	7.8
616	266810	NAD(P) TRANSHYDROGENASE SUBUNIT BETA transhydrogenase [Escherichia coli] transhydrogenase (B-specific) (EC 1.6.1.1) b chain NAD(P)+ transhydrogenase (B-specific) (EC 1.6.1.1) b chain [Escherichia coli] >gi|1787886 (AE000255) pyridine nucleotide transhydro	7.6
617	807646	(M17294) unknown protein [Human herpesvirus 4]	7.6
618	829186	(X03879) rudimentary protein fragment	7.4
619	4322346	(AF081825) sodium-dependent high-affinity dicarboxylate transporter [Rattus norvegicus]	7.4
620	3334785	(AL031107) hypothetical protein SC5A7.04c	7.4
621	1346720	PHOSPHATIDYLINOSITOL-4-PHOSPHATE 5-KINASE TYPE II ALPHA (PIP5KII-ALPHA) KINASE) >gi|1079474|pir||A55967 1-phosphatidylinositol-4-phosphate 5-kinase (EC 2.7.1.68) - human >gi|758697 (U14957) 53K isoform of Type II phosphatidylinositol-4-phosphate 5-kinase	7.3
622	4105819	(AF050175) Rab7 [Homo sapiens]	6.4
623	155865	(M93125) 80 kDa protein [Babesia bovis]	6.3
624	2133638	boule protein - fruit fly (Drosophila melanogaster) >gi|1395211 (U51858) boule protein	6.2
625	1788052	(AE000270) putative transport system permease protein	6.2
626	3875616	(Z77657) F08H9.9 [Caenorhabditis elegans]	6.2
627	2499150	HYPOTHETICAL PROTEIN IN CPS REGION	6.2
628	1170758	GALECTIN-3 (GALACTOSE-SPECIFIC LECTIN 3) (MAC-2 ANTIGEN) (IGE-BINDING PROTEIN) (35 KD LECTIN) (CARBOHYDRATE BINDING PROTEIN 35) (CBP 35)	6.1
629	2495335	HEAT SHOCK PROTEIN 42 (42 KD HEAT SHOCK PROTEIN) >gi|1077219|pir||S49767 heat shock protein HSP42 - yeast (Saccharomyces cerevisiae)	6
630	1086677	(U41020) coded for by C. elegans cDNA yk64f5.3; coded for by C. elegans cDNA yk64f5.5; Similar to zinc finger. [Caenorhabditis elegans]	6
631	1170758	GALECTIN-3 (GALACTOSE-SPECIFIC LECTIN 3) (MAC-2 ANTIGEN) (IGE-BINDING PROTEIN) (35 KD LECTIN) (CARBOHYDRATE BINDING PROTEIN 35) (CBP 35)	6
632	440957	Achaete-Scute homolog Mash-1 gene product	6
633	1786037	(U72284) NADH dehydrogenase subunit 2 [Apis mellifera]	6

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
634	2495335	HEAT SHOCK PROTEIN 42 (42 KD HEAT SHOCK PROTEIN) >gi|1077219|pir||S49767 heat shock protein HSP42 - yeast (Saccharomyces cerevisiae)	6
635	2662541	(AF036687) contains similarity to protease inhibitors, WAP-type four-disulfide core domains and thyroglobulin type-1 repeats [Caenorhabditis elegans]	5.7
636	118249	DAUGHTERLESS PROTEIN fly (Drosophila melanogaster) >gi|7839|emb|CAA68368| melanogaster] >gi|157174 (J03148) daughterless protein	5.6
637	2447066	(U42580) A570L [Paramecium bursaria Chlorella virus 1]	5.6
638	400927	RIBONUCLEOPROTEIN RB97D ribonucleoprotein [Drosophila melanogaster]	4.9
639	121189	GLUCOSE INHIBITED DIVISION PROTEIN A gidA [Pseudomonas putida]	4.8
640	3033398	(AC004238) putative phosphoribosylaminoimidazolecarboxamide formyltransferase [Arabidopsis thaliana]	4.6
641	126691	POSSIBLE MALTASE PRECURSOR (LARVAL VISCERAL PROTEIN D) >gi|103222|pir||S08597 hypothetical protein D - fruit fly (Drosophila melanogaster) melanogaster]	4.5
642	134087	RETROTRANSPOSABLE ELEMENT SLACS 132 KD PROTEIN (ORF2) >gi|84054|pir||S14916 hypothetical protein 2 - Trypanosoma brucei gambiense transposon SLACS >gi|10535|emb|CAA34931| (X17078) ORF 2	4.3
643	567166	(L03172) This CDS feature is included to show the translation of the corresponding V_region. Presently translation qualifiers on V_region features are illegal.	3.7
644	4355	(Z14126) RhoNUC protein [Saccharomyces cerevisiae]	3.7
645	462679	MYOSIN IB HEAVY CHAIN heavy chain [Dictyostelium discoideum]	3.6
646	1098989	(U41508) similar to C. elegans proteins C26E6.9A and C26E6.9B; weakly similar to malate synthase G	2.1
647	3249559	(AF018261) EH domain binding protein Epsin [Rattus norvegicus]	2
648	2435594	(AF026212) No definition line found [Caenorhabditis elegans]	2
649	995808	(U32240) Ig heavy chain [Mus musculus]	2
650	3281870	(AL031004) putative protein [Arabidopsis thaliana]	1.8
651	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	1.6
652	1628461	(Y08775) Men-3 [Silene latifolia]	1.2

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
653	483165	hypothetical protein - Marek's disease virus gammaherpesvirus tumorigenicity associated mRNA, two complete cds's.], gene products [Gallid herpesvirus type 1] >gi|299459|bbs|129316 (S58431) CD4 precursor homolog to CD4 and IgM heavy chain [Gallid herpesvir	0.93
654	483165	hypothetical protein - Marek's disease virus gammaherpesvirus tumorigenicity associated mRNA, two complete cds's.], gene products [Gallid herpesvirus type 1] >gi|299459|bbs|129316 (S58431) CD4 precursor homolog to CD4 and IgM heavy chain [Gallid herpesvir	0.87
655	120359	*RECOMBINASE FLP PROTEIN*	0.71
656	1711563	STERYL-SULFATASE PRECURSOR (STEROID SULFATASE) (STERYL-SULFATE SULFOHYDROLASE) sulfatase [Mus musculus]	0.55
657	731849	HYPOTHETICAL 13.5 KD PROTEIN IN MOB1-SGA1 INTERGENIC REGION >gi|626376|pir||S48473 probable membrane protein YIL100w - yeast (Saccharomyces cerevisiae) >gi|558707|emb|CAA86281| (Z38125) orf, len: 117, CAI: 0.08, better positional base preference calculati	0.55
658	1669674	(X86819) Microtubule-associated protein 4	0.3
659	2493735	SKD3 PROTEIN SKD3 [Mus musculus]	0.25
660	110030	homeotic protein Hox 5.1 - mouse	0.19
661	1947160	(AF000298) weak similarity to collagens; glycine- and proline-rich [Caenorhabditis elegans]	0.012
662	4567275	(AC006841) hypothetical protein [Arabidopsis thaliana]	0.005
663	2677676	(AC002467) DRA protein (down-regulated in adenoma); sulfate transporter; match to P40879 (PID:g729367) [Homo sapiens]	4e-056
671	345474	hypothetical protein 2 - Mediterranean fruit fly >gi|5977|emb|CAA49660| (X70053) unknown [Ceratitis capitata]	9.4
672	4538951	(AL049488) putative protein [Arabidopsis thaliana]	9.1
673	1749646	(D89219) unnamed protein product	7
674	320302	ORF X protein - human papillomavirus type 41	5.5
675	267288	REPLICATION PROTEIN E1 papillomavirus (type 1) >gi|61013|emb|CAA44657| (X62844) E1 [Pygmy chimpanzee papillomavirus type 1]	5.4
676	3581899	(AL031543) hypothetical serine-rich protein [Schizosaccharomyces pombe]	4.2

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
677	3881119	(AL032653) predicted using Genefinder; cDNA EST EMBL:D36367 comes from this gene; cDNA EST yk408c12.5 comes from this gene [Caenorhabditis elegans]	4.2
678	1169663	TRANSCRIPTIONAL ACTIVATOR FE65 APP interacting protein [Rattus rattus]	4
679	1565257	(X57108) cerebroside sulfate activator	3.2
680	3093358	(AJ005559) SPR2A protein [Mus musculus]	1.1
681	1763113	(U71019) NADH dehydrogenase subunit F [Arrhenatherum elatius]	0.6
682	3548791	(AC005620) R33590_1 [Homo sapiens]	0.46
683	4567275	(AC006841) hypothetical protein [Arabidopsis thaliana]	0.025
684	3882311	(AB018338) KIAA0795 protein [Homo sapiens]	7e-017
687	2443342	(D88764) alpha 2 type I collagen [Rana catesbeiana]	5.1
688	220464	(D00232) E3 anti-[4-hydroxy-3-nitrophenyl(phenolate + phenolic form)] acetyl mAb V-L region [Mus musculus]	6.4
689	1351502	HYPOTHETICAL PROTEIN MG181 Mycoplasma genitalium (SGC3) >gi|3844777 (U39697) conserved hypothetical protein [Mycoplasma genitalium]	2.1
693	250891	(S39392) protein tyrosine phosphatase, PTPase	4.6
695	3323042	(AE001245) sugar ABC transporter, periplasmic binding protein (msmE) [Treponema pallidum]	5.8
696	1001741	(D64004) hypothetical protein	2.7
697	1169288	DIHYDROXYACETONE KINASE (GLYCERONE KINASE) >gi|493083 (U09771) dihydroxyacetone kinase	3e-010
698	1169288	DIHYDROXYACETONE KINASE (GLYCERONE KINASE) >gi|493083 (U09771) dihydroxyacetone kinase	3e-010
699	3879530	(Z49130) cDNA EST yk486b9.3 comes from this gene; cDNA EST yk486b9.5 comes from this gene	7e-005
700	2191127	(AF007269) A_IG002N01.1 gene product [Arabidopsis thaliana]	0.0004
701	4504923	keratin, hair, acidic,2 type I intermediate filament [Homo sapiens]	1.5
702	2633756	(Z99111) similar to heavy metal-transporting ATPase [Bacillus subtilis]	7.4
703	3876796	(Z81531) F36D3.6 [Caenorhabditis elegans]	7.3
705	123299	HOMEOBOX PROTEIN HOX-D4 (HOX-4B) protein Hox D4 - human >gi|296652|emb|CAA35237| (X17360) hox 5.1 protein [Homo sapiens]	2.4
706	99899	DNA-directed RNA polymerase (EC 2.7.7.6) largest chain (isoform C) - soybean (fragment) polymerase [Glycine max]	0.83
707	4263788	(AC006068) hypothetical protein	0.28

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
708	500858	(D14168) 50kDa lectin [Bombyx mori]	4e-011
711	142283	(M30318) put. periplasmic receptor protein (chvE); putative [Agrobacterium tumefaciens]	9.2
712	4502949	collagen, type II, alpha 1 congenital) >gi|115287|sp|P02458|CA12_HUMAN PROCOLLAGEN ALPHA 1(II) CHAIN PRECURSOR [CONTAINS: CHONDROCALCIN] 1-1418) [Homo sapiens]	6.9
713	4539163	(AL049485) putative phytoene synthase	0.81
715	4056437	(AC005990) Strong similarity to PFAM PF|00069 Eukaryotic protein kinase domain. [Arabidopsis thaliana]	2.3
716	119296	ELASTIN PRECURSOR (TROPOELASTIN) gallus]	1.3
717	4226073	(AF125443) contains similarity to S. pombe phosphatidyl synthase (GB:Z28295) [Caenorhabditis elegans]	8e-016
719	2498761	PEROXISOMAL MEMBRANE PROTEIN PMP30A protein - yeast (Candida boidinii) >gi|457391 (L27999) peroxisomal membrane protein 31 [Candida boidinii]	1.3
720	3914963	SECRETORY CARRIER-ASSOCIATED MEMBRANE PROTEIN 3 >gi|2232237 (AF005036) secretory carrier membrane protein [Mus musculus]	0.58
721	4457204	(AF108226) immunoglobulin mu heavy chain precursor [Monodelphis domestica]	0.15
722	3860573	(AJ235270) unknown [Rickettsia prowazekii]	4.9
723	2829912	(AC002291) Similar ATP-dependent RNA Helicase	0.0002
724	2130573	(U96771) putative polygalacturonase [Prevotella bryantii]	6.1
725	539244	hypothetical protein YKR028w - yeast	6.1
726	2633502	(Z99110) similar to hypothetical proteins from B. subtilis [Bacillus subtilis]	4.7
728	1078087	hypothetical protein YLR424w - yeast	1.6
729	4240219	(AB020672) KIAA0865 protein [Homo sapiens]	2
732	3165370	(AB011874) alpha subunit of dinitrogenase reductase (Fe protein) [unidentified nitrogen-fixing bacteria]	9.3
733	3882195	(AB018280) KIAA0737 protein [Homo sapiens]	2e-061
735	3859938	(AF081101) reverse transcriptase [Lymantria dispar]	2.3
737	974143	(L42542) RLIP76 protein [Homo sapiens]	8.4
738	3877493	(Z48583) similar to ATPases associated with various cellular activities (AAA); cDNA EST EMBL:Z14623 comes from this gene; cDNA EST EMBL:D75090 comes from this gene; cDNA EST EMBL:D72255 comes from this gene; cDNA EST yk200e4.5 ...	3e-047
739	4240235	(AB020680) KIAA0873 protein [Homo sapiens]	3e-052
740	4191810	(AB006532) DNA helicase [Homo sapiens]	1e-065
741	4507851	reserved protease [Homo sapiens]	2e-071

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
742	3876797	(Z81531) cDNA EST EMBL:D66579 comes from this gene; cDNA EST EMBL:D70408 comes from this gene; cDNA EST yk263d3.5 comes from this gene; cDNA EST yk275c1.5 comes from this gene; cDNA EST EMBL:C10270 comes from this gene [Caenorh...	2.7
743	4376875	(AE001642) CT465 hypothetical protein	0.53
744	91305	sperm mitochondrial capsule selenoprotein - mouse	0.32
745	1938549	(U97016) similar to drosophila Rlc1 gene product ribosomal protein L4 (YML4) (NID:g459259)	9e-016
751	3882189	(AB018277) KIAA0734 protein [Homo sapiens]	7.8
752	505665	(U08023) novel cellular proto-oncogene [Homo sapiens]	7.8
753	3170498	(AF052872) APETALA3 homolog PcAP3 [Papaver californicum]	6
754	1082243	autotaxin precursor - human >gi|537906	2.6
755	4507721	titin >gi|1212992|emb|CAA62188| via Swiss-Prot; available at present via e-mail from LABEIT@EMBL-Heidelberg.DE [Homo sapiens]	1.5
756	3036883	(AL022374) putative ABC transporter	0.68
757	543593	hypothetical 39.8K protein (clone GV-B) - garlic virus B	0.06
758	79960	hypothetical 30.5K protein - Enterococcus faecalis plasmid pAM-beta-1 >gi|3023044 (AF007787) orfC	1e-024
759	3882195	(AB018280) KIAA0737 protein [Homo sapiens]	6e-060
766	1707719	(Y08256) orf c02007 [Sulfolobus solfataricus]	9.8
767	2133808	immunoglobulin heavy chain - nurse shark	7.6
768	1469880	(D63483) The KIAA0149 gene product is related to Notch3. [Homo sapiens]	7.5
769	4454062	(AJ132911) NorD protein [Bradyrhizobium japonicum]	5.9
770	137532	PROTEIN C2 >gi|74386|pir||WZVZB6 59K HindIII-C protein - vaccinia virus (strain WR)	4.4
771	1098985	(U41031) proline-rich [Caenorhabditis elegans]	3.4
772	4378891	(AF132481) Ese1L protein [Mus musculus]	2.6
773	4557489	cone-rod homeobox PROTEIN >gi|2665534 (AF024711) cone rod homeobox protein	1.5
774	2135894	peripheral benzodiazepine receptor - human	0.52
775	477495	cell-fate determining gene Notch2 protein - rat	0.51
776	1945493	(U56965) Similar to NAD(P) transhydrogenase, mitochondrial; coded for by C. elegans cDNA yk27c1.5; coded for by C. elegans cDNA yk35b9.5; coded for by C. elegans cDNA yk35b9.3; coded for by C. elegans cDNA yk161c9.3; coded for by C. elegans ...	0.39
777	746516	(U23517) D1022.7 [Caenorhabditis elegans] >gi|3258651 elegans]	0.059

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
778	2498786	GLYCEROL-3-PHOSPHATE ACYLTRANSFERASE PRECURSOR (GPAT) (P90) acyltransferase homolog - mouse >gi|193367 (M77003) glycerol-3-phosphate acyltransferase [Mus musculus]	0.058
779	2134384	procKr2 - chicken (fragment) gallus]	0.015
780	4176500	(AL031177) dJ889M15.3 (novel protein)	0.001
781	500858	(D14168) 50kDa lectin [Bombyx mori]	5e-010
782	4204294	(AC003027) lcl|prt_seq No definition line found	3e-010
783	500858	(D14168) 50kDa lectin [Bombyx mori]	2e-010
784	3184082	(AL023781) N-terminal acetyltransferase 1	6e-014
785	3184082	(AL023781) N-terminal acetyltransferase 1	3e-014
786	1330401	(U58762) T27F7.1 gene product [Caenorhabditis elegans]	6e-030
787	1330401	(U58762) T27F7.1 gene product [Caenorhabditis elegans]	3e-030
788	3879850	(Z81592) predicted using Genefinder	8e-034
789	1072198	(U40942) No definition line found [Caenorhabditis elegans]	1e-037
790	3327160	(AB014573) KIAA0673 protein [Homo sapiens]	1e-062
791	3413886	(AB007931) KIAA0462 protein [Homo sapiens]	1e-073
800	1903264	(Y11824) hypothetical protein [Pisum sativum]	9.5
801	2739276	(AJ223176) Ser/Thr protein kinase	5.6
802	4521264	(AB015874) guanylate cyclase OlGC-R2	5.6
803	2144044	zinc finger protein AT-BP2 - black rat protein AT-BP2 [Rattus rattus]	5.5
804	4049682	(AF063866) ORF MSV092 hypothetical protein [Melanoplus sanguinipes entomopoxvirus]	4.3
805	2842704	HYPOTHETICAL 73.3 KD PROTEIN C6G9.14 IN CHROMOSOME I >gi|1644326|emb|CAB03616.1| pr otein [Schizosaccharomyces pombe]	3.2
806	1526981	(X99945) amino acid permease YeeF like protein [Salmonella typhimurium]	2.5
807	1082243	autotaxin precursor - human >gi|537906	2.5
808	3660667	(AF055079) inositol 1,4,5-trisphosphate receptor	2.4
809	2500002	PHOSPHORIBOSYLAMINE--GLYCINE LIGASE PHOSPHORIBOSYLFORMYLGLYCINAMIDINE CYCLO-LIGASE (AIRS) synthetase, aminoimidazole ribonucleotide synthetase, glycinamide ribonucleotide transformylase {EC 6.3.4.13, 6.3.3.1, 2.1.2.2} [Chironomus tentans, Peptide, 1371 aa	2.4
810	4507721	titin >gi|1212992|emb|CAA62188| via Swiss-Prot; available at present via e-mail from LABEIT@EMBL-Heidelberg.DE [Homo sapiens]	1.5

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
811	4507721	titin >gi|1212992|emb|CAA62188| via Swiss-Prot; available at present via e-mail from LABEIT@EMBL-Heidelberg.DE [Homo sapiens]	1.4
812	2833215	INTERFERON-ACTIVATABLE PROTEIN 205 protein - mouse >gi|385703|bbs|133592 (S62227) D3=lipopolysaccharide-inducible [mice, macrophages, Peptide, 425 aa] [Mus sp.]	1.1
813	1262910	(U51645) cytidine triphosphate synthetase [Plasmodium falciparum]	0.64
814	1245061	(U46069) fertilin alpha subunit [Oryctolagus cuniculus]	0.005
815	4493746	(AL034358) predicted using hexExon; *L4830.10, Hypothetical* protein, len: 816 aa [Leishmania major]	0.003
816	3283350	(AF062378) calmodulin-binding protein SHA1 [Mus musculus]	0.003
817	4204294	(AC003027) lcl|prt_seq No definition line found	3e-006
818	4309681	(AC006930) R33423_1 [Homo sapiens]	4e-007
819	3293547	(AF072709) putative oxidoreductase [Streptomyces lividans]	5e-013
820	1086900	(U41278) contains similarity to G beta repeats	2e-028
821	3878739	(Z73428) similar to Zinc finger, C3HC4 type (RING finger); cDNA EST EMBL:D67323 comes from this gene [Caenorhabditis elegans] >gi|3881096|emb|CAB16481| finger); cDNA EST EMBL:D67323 comes from this gene	6e-031
822	3882195	(AB018280) KIAA0737 protein [Homo sapiens]	1e-053
823	3095186	(AF057140) cargo selection protein TIP47 [Homo sapiens]	7e-060
841	1915885	(Y08370) alpha-amylase [Crassostrea gigas]	9.2
842	1621461	(U73103) laccase [Liriodendron tulipifera]	9.2
843	232620	(S41487) possible ribosomal protein=l(3)S12 Canton S wild type [Drosophila melanogaster, Peptide, 73 aa] [Drosophila melanogaster]	9.1
844	1731338	HYPOTHETICAL 73.6 KD PROTEIN CY49.21 >gi|1370248|emb|CAA98194| (Z73966) hypothetical protein Rv2082 [Mycobacterium tuberculosis]	6.9
845	3873261	(AF096295) cytochrome oxidase subunit I [Naja siamensis]	6.9
846	4049727	(AF063866) ORF MSV173 putative serine/threonine protein kinase Swinepox virus C20L homolog (vaccinia F10L), similar to SW:P32216 [Melanoplus sanguinipes entomopoxvirus]	5.5
847	1175595	HYPOTHETICAL PROTEIN HI1265	4.1
848	446631	collagen:SUBUNIT=alpha2:ISOTYPE=IX [Homo sapiens]	4.1

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
849	627171	odz protein - fruit fly (Drosophila sp.) product=tenascin homolog [Drosophila melanogaster, 9- to 12-hour-old embryos, Peptide, 2406 aa]	3.2
850	3986440	(AF076785) serum amyloid A-activating factor SAF-5	3.1
851	91312	stem cell protein ERA-1-399, retinoic acid-induced - mouse >gi|387146 (M22115) ERA-1-399 protein [Mus musculus]	1.4
852	4102043	(AF008203) homeobox protein [Homo sapiens]	1.3
853	746516	(U23517) D1022.7 [Caenorhabditis elegans] >gi|3258651 elegans]	0.28
854	2935691	(AF032122) unknown [Streptococcus thermophilus bacteriophage Sfi19]	0.21
855	99972	nodule-specific (hydroxy)proline-rich protein	0.014
856	1169288	DIHYDROXYACETONE KINASE (GLYCERONE KINASE) >gi|493083 (U09771) dihydroxyacetone kinase	1e-005
857	3721912	(AB017156) gob-5 [Mus musculus]	1e-011
858	868241	(U29488) C56C10.3 gene product [Caenorhabditis elegans]	3e-012
859	3293547	(AF072709) putative oxidoreductase [Streptomyces lividans]	5e-013
860	2228750	(U93868) RNA polymerase III subunit [Homo sapiens]	1e-015
861	1175412	HYPOTHETICAL 24.2 KD PROTEIN C13A11.03 IN CHROMOSOME I >gi|984224|emb|CAA90804|	5e-021
883	4505413	non-metastatic cells 5, protein expressed in (nucleoside-diphosphate kinase) KINASE HOMOLOG 5 (NDK-H 5) (NDP KINASE HOMOLOG 5) nucleoside-diphosphate kinase [Homo sapiens] >gi|3811115 sapiens]	9
884	3308984	(AB008516) mtprd [Mus musculus]	9
885	3273643	(AF042021) olfactory receptor [Sus scrofa]	9
886	1170338	HETEROCHROMATIN PROTEIN 1 HOMOLOG ALPHA (HP1 ALPHA) (ANTIGEN P25) >gi|184311 (L07515) complete cds.], gene product [Homo sapiens] chromosomal autoantigen [human, Peptide, 191 aa] [Homo sapiens]	9
887	1125745	(U42832) coded for by C. elegans cDNA yk107c8.5; coded for by C. elegans cDNA yk107c8.3; Similar to UDP-glucuronosyltransferase. [Caenorhabditis elegans]	6.9
888	2921102	(AF020337) P6 [rice ragged stunt virus]	6.9
889	1707199	(U80841) C13A10.1 gene product [Caenorhabditis elegans]	6.8
890	1125745	(U42832) coded for by C. elegans cDNA yk107c8.5; coded for by C. elegans cDNA yk107c8.3; Similar to UDP-glucuronosyltransferase. [Caenorhabditis elegans]	5.3

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
891	2493564	PUTATIVE RIBOFLAVIN BIOSYNTHESIS ENZYME >gi|1707704|emb|CAA69508| (Y08256) riboflavin biosynthesis protein ribG [Sulfolobus solfataricus]	5.2
892	2276148	(Z81463) Similarity to C.elegans zinc finger proteins [Caenorhabditis elegans]	5.2
893	1346425	L-LACTATE DEHYDROGENASE 1.1.1.27) - Mycoplasma genitalium (SGC3) >gi|1046180	5.2
894	4234795	(AF078135) unknown [Leptospira borgpetersenii]	5.2
895	3874963	(Z92780) cDNA EST EMBL:D75953 comes from this gene [Caenorhabditis elegans]	4
896	3875723	(Z54270) similar to membrane glycoprotein	3.9
897	1086593	(U41007) C33H5.15 gene product [Caenorhabditis elegans]	3.9
898	3289979	(AC005263) SP62_HUMAN; SAP 62; SF3A66 [Homo sapiens]	3.1
899	2208965	(Y10528) cyanide insensitive terminal oxidase [Pseudomonas aeruginosa]	3
900	4539386	(AL035526) extensin-like protein	1.8
901	2662561	(AF036692) Similar to seven transmembrane receptor	1.8
902	2129184	pheromone shutdown protein homolog - Methanococcus jannaschii >gi|1592009 (U67576) pheromone shutdown protein (traB) [Methanococcus jannaschii]	1.3
903	2317864	(U78289) tylactone synthase module 7 [Streptomyces fradiae]	0.61
904	3808242	(AF069669) pol protein [Human immunodeficiency virus type 1]	0.6
905	3327128	(AB014557) KIAA0657 protein [Homo sapiens]	0.46
906	294529	(L14933) convertase PC5 [Rattus norvegicus]	0.35
907	3005087	(AF044924) hcok2 protein [Homo sapiens]	0.12
908	3297817	(AL031032) putative protein [Arabidopsis thaliana]	0.025
909	3941342	(AF043250) mitochondrial outer membrane protein [Homo sapiens] >gi|3941347 (AF043253) mitochondrial outer membrane protein [Homo sapiens] >gi|4105703|gb|AAD02504|	0.01
910	480989	finger protein rfp - mouse (fragment)	5e-006
911	2842526	(AL021746) hypothetical anaphase promoting factor component [Schizosaccharomyces pombe] anaphase promoting complex component	3e-018
912	4226073	(AF125443) contains similarity to S. pombe phosphatidyl synthase (GB:Z28295) [Caenorhabditis elegans]	4e-022
913	3551821	(AF058803) mucin 4 [Homo sapiens]	3e-038
914	3882195	(AB018280) KIAA0737 protein [Homo sapiens]	4e-051

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
940	279539	RNA-directed RNA polymerase (EC 2.7.7.48) - Marburg virus (strain Musoke) >gi|332179 (M92834) L Protein [Marburg virus]	8.7
941	117865	CYTOCHROME B >gi|2144288|pir||H22848 ubiquinol--cytochrome-c reductase (EC 1.10.2.2) cytochrome b - Sauroleishmania tarentolae mitochondrion	8.6
942	3764008	(AL008970) predicted using hexExon; MAL3P4.10 (PFC0515c), Hypothetical protein, len: 1237 aa	8.6
943	3649770	(Z98547) predicted using hexExon; MAL3P3.11 (PFC0380w), Dual-specificity protein phosphatase, len: 581 aa; Similarity to protein phosphatases. S.cerevisiae protein-tyrosine phosphatase YVH1 (SW:PVH1_YEAST) BLAST Score: 123, s...	6.5
944	1125745	(U42832) coded for by C. elegans cDNA yk107c8.5; coded for by C. elegans cDNA yk107c8.3; Similar to UDP-glucuronosyltransferase. [Caenorhabditis elegans]	5.1
945	2208965	(Y10528) cyanide insensitive terminal oxidase [Pseudomonas aeruginosa]	5
946	2146997	L-selectin precursor - rabbit >gi|847788	5
947	135091	ALANYL-TRNA SYNTHETASE (ALANINE--TRNA LIGASE) (ALARS) >gi|95227|pir||S16897 alanine--tRNA ligase (EC 6.1.1.7) - Rhizobium leguminosarum bv. viciae synthetase [Rhizobium leguminosarum]	3.8
948	1171815	NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 4 >gi|102585|pir|S26021 NADH dehydrogenase mitochondrion (SGC4) >gi|559495|emb|CAA38170| (X54253) ND4 protein [Ascaris suum]	3.8
949	2120034	glycoprotein B homolog precursor - feline herpesvirus 1 >gi|261095|bbs|120003 (S49775) glycoprotein B homolog [feline herpesvirus type 1 FHV-1, Peptide, 948 aa] [Feline herpesvirus 1]	1.7
950	4507539	UNKNOWN >gi|2587054 (AF027204) putative tetraspan transmembrane protein L6H [Homo sapiens]	0.99
951	417237	CHEMOTAXIS LAFT PROTEIN parahaemolyticus >gi|677909 (U20541) LafT [Vibrio parahaemolyticus] >gi|1518953 (U52957) LafT [Vibrio parahaemolyticus]	0.26
952	3798624	(AF082100) FK506 polyketide synthase [Streptomyces sp. MA6548]	0.12
953	4493746	(AL034358) predicted using hexExon; L4830.10, Hypothetical protein, len: 816 aa [Leishmania major]	0.003
954	1175412	HYPOTHETICAL 24.2 KD PROTEIN C13A11.03 IN CHROMOSOME I >gi|984224|emb|CAA90804|	6e-014
955	4240235	(AB020680) KIAA0873 protein [Homo sapiens]	8e-044

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
976	1350599	RIBONUCLEOSIDE-DIPHOSPHATE REDUCTASE ALPHA CHAIN (RIBONUCLEOTIDE REDUCTASE) reductase (EC 1.17.4.1) - Mycoplasma genitalium (SGC3) reductase, alpha chain (nrdE) [Mycoplasma genitalium]	8.2
977	731840	HYPOTHETICAL 23.9 KD PROTEIN IN SGA1-KTR7 INTERGENIC REGION >gi|1077785|pir||S49791 probable membrane protein YIL089w - yeast (Saccharomyces cerevisiae) >gi|577125|emb|CAA86705.1| (Z46728) YI9910.07, unknown orf, len: 205, CAI: 0.11	6.4
978	2132436	probable membrane protein YDL118w - yeast	6.3
979	1710518	60S RIBOSOMAL PROTEIN L22 homologue to human L22 [Xenopus laevis]	6.3
980	3602956	(AF041468) rbcR homolog [Guillardia theta]	4.9
981	2146997	L-selectin precursor - rabbit >gi|847788	4.8
982	3880890	(AL023838) predicted using Genefinder; similar to Helix-hairpin-helix motif.; cDNA EST yk241d12.5 comes from this gene; cDNA EST yk401c3.5 comes from this gene; cDNA EST CEMSE47F comes from this gene [Caenorhabditis elegans]	4.8
983	3880727	(AL032632) predicted using Genefinder	2.8
984	1352547	NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 2 >gi|2147757|pir||S62766 NADH dehydrogenase caldarium) mitochondrion (fragment) subunit 2 [Cyanidium caldarium]	2.2
985	3551845	(AF071879) capsid protein [Porcine circovirus]	2.1
986	3249009	(AF068139) S5 ribosomal protein/maturase fusion protein [Cryphonectria parasitica]	2.1
987	1707126	(U80454) T16A1.2 [Caenorhabditis elegans]	2.1
988	1497971	(U55797) VP6 [Bluetongue virus]	1.7
989	3877568	(Z70208) similar to collagen	0.97
990	3309543	(AF036382) MLL [Fugu rubripes]	1e-005
991	4240235	(AB020680) KIAA0873 protein [Homo sapiens]	2e-039
1015	3257605	(AP000005) 484aa long hypothetical protein	8.2
1016	37593	(X57019) unnamed protein product [Homo sapiens] >gi|238775|bbs|65126 (S65125) putative tyrosine kinase receptor=UFO [human, NIH3T3, Peptide, 894 aa]	8.1
1017	746533	(U23520) similar to cuticular collagen [Caenorhabditis elegans]	8
1018	729045	BETA CASEIN PRECURSOR scrofa]	7.9
1019	1170463	INTERLEUKIN-1 BETA CONVERTASE PRECURSOR (IL-1BC) (IL-1 BETA CONVERTING ENZYME) (ICE) converting enzyme [Rattus norvegicus]	7.8

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1020	1197641	(U46859) DdhB [Yersinia enterocolitica (type 0:8)]	6
1021	2104691	(U92794) alpha glucosidase II, beta subunit [Mus musculus]	4.7
1022	1139577	(D63706) Orf5 [Streptomyces griseus]	4.7
1023	136785	EARLY GLYCOPROTEIN GP48 PRECURSOR glycoprotein (18) [human herpesvirus 5]	3.5
1024	1314757	(U54761) phosphoglucose isomerase [Erwinia amylovora]	2.6
1025	2497383	PUTATIVE TRANSPOSASE FOR INSERTION SEQUENCE IS408 >gi|309869 (L09108) IS408 transposase; putative [Pseudomonas cepacia] >gi|1097384|prf|2113421C transposase [Burkholderia cepacia]	1.6
1026	1346281	CHITOOLIGOSACCHARIDOLYTIC BETA-N-ACETYLGLUCOSAMINIDASE PRECURSOR (BETA-GLCNACASE) 3.2.1.-) - silkworm >gi|998377|bbs|165703 (S77548) chitooligosaccharidolytic beta-N-acetylglucosaminidase, beta-GlcNAcase=beta 1 enzyme [Bombyx mori=silkworms, larvae, Kinsh	0.7
1027	3121722	ALPHA-1D ADRENERGIC RECEPTOR (ALPHA 1D-ADRENOCEPTOR) (ALPHA-1A ADRENERGIC RECEPTOR) receptor [mice, brain, Peptide, 562 aa] [Mus sp.]	0.18
1028	4071321	(AF073954) Y-box protein MSY2 [Mus musculus]	0.14
1029	1293835	(U56965) C15H9.5 gene product [Caenorhabditis elegans]	0.11
1030	2822157	(AC004084) similar to GTPase-activating proteins; 35% similar to JC5047 (PID:g2136083) [Homo sapiens]	2e-013
1040	1877301	(Z92774) hypothetical protein Rv3570c	9.7
1041	3024629	GAMMA-SOLUBLE NSF ATTACHMENT PROTEIN (SNAP-GAMMA) >gi|423252|pir||S32369 gamma-SNAP protein - bovine >gi|298669|bbs|127528 gamma soluble NSF attachment protein, gamma SNAP=N-ethyl-maleimide-sensitive fusion protein attachment protein [cattle, brain, Pepti	7.8
1042	731044	UBIQUITIN CARBOXYL-TERMINAL HYDROLASE 7 (UBIQUITIN THIOLESTERASE 7) probable membrane protein YIL156w - yeast (Saccharomyces cerevisiae) >gi|557767|emb|CAA86122| (Z38059) orf, len: 1071, CAI: 0.13, some similarity with ubiquitin carboxy terminal hydrolase	7.6
1043	2190592	(U78315) Hermansky-Pudlak syndrome protein homolog [Mus musculus]	4.3
1044	2627435	(AF013614) No definition line found [Fugu rubripes]	3.5

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1045	3881166	(AL032641) Y5F2A.3 [Caenorhabditis elegans]	2
1046	729918	LA PROTEIN HOMOLOG (LA RIBONUCLEOPROTEIN) (LA AUTOANTIGEN HOMOLOG)	0.009
1047	4106562	(Z83819) dJ146H21.2 (similar to CYTOCHROME B-245 HEAVY CHAIN) [Homo sapiens]	3e-017
1048	4557535	down-regulated in adenoma protein down-regulated in adenoma (DRA) - human >gi|291964 576-580, 579-583; acidic transcr. activ. domain 620-640,; homeobox motif 653-676 [Homo sapiens]	4e-026
1049	4240235	(AB020680) KIAA0873 protein [Homo sapiens]	1e-037
1050	4240235	(AB020680) KIAA0873 protein [Homo sapiens]	2e-056
1065	586240	VITAMIN K-DEPENDENT GAMMA-CARBOXYLASE (GAMMA-GLUTAMYL CARBOXYLASE) 4.1.1.-) - bovine >gi|289399 (L09726) gamma-carboxylase	9.6
1066	3413410	(AL031231) 30S ribosomal protein S15	7.4
1067	1170758	GALECTIN-3 (GALACTOSE-SPECIFIC LECTIN 3) (MAC-2 ANTIGEN) (IGE-BINDING PROTEIN) (35 KD LECTIN) (CARBOHYDRATE BINDING PROTEIN 35) (CBP 35)	7.4
1068	867985	(L39002) S1 gene product [Avian orthoreovirus] orthoreovirus]	7.4
1069	127494	METALLOTHIONEIN (MT) lucius] >gi|62783|emb|CAA49636| (X70042) Metallothioein	7.3
1070	3150259	(AL023634) palmitoyl-protein thioesterase precursor [Schizosaccharomyces pombe]	5.7
1071	328647	(M81729) tat [Human immunodeficiency virus type 1]	4.3
1072	2605979	(AF030027) 35 [Equine herpesvirus 4]	3.3
1073	137532	PROTEIN C2 >gi|74386|pir||WZVZB6 59K HindIII-C protein - vaccinia virus (strain WR)	3.3
1074	3769620	(AF091563) olfactory receptor [Rattus norvegicus]	3.3
1075	687367	(U15829) envelope glycoprotein V3-V5 loop region [Human immunodeficiency virus type 1]	1.4
1076	3915901	TRANSCRIPTION INITIATION FACTOR TFIID 60 KD SUBUNIT (TAFII-60) (TAFII60)	0.48
1077	2317934	(U97553) unknown [murine herpesvirus 68]	0.37
1080	3878966	(Z68009) R09A8.1 [Caenorhabditis elegans]	9.1
1081	2341037	(AC000104) F19P19.17 [Arabidopsis thaliana]	2.3
1084	4508019	zinc finger protein 231 protein [Homo sapiens]	8.9

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1085	3877198	(Z69903) predicted using Genefinder; Similarity to Rat casein kinase I (SW:KC1D_RAT); cDNA EST EMBL:D65322 comes from this gene; cDNA EST EMBL:D68704 comes from this gene; cDNA EST yk475f2.5 comes from this gene [Caenorhabditis...	4
1086	171998	(J02691) mitochondrial phenylalanyl-tRNA synthetase alpha subunit precursor [Saccharomyces cerevisiae]	2.3
1087	135574	LARGE TEGUMENT PROTEIN BPLF1 reading frame, 1 NXT/S, analogous to VZV RF22 BPLF1 [Human herpesvirus 4]	0.77
1091	1718312	(U75698) ORF K10 [Kaposi's sarcoma-associated herpesvirus]	9.8
1092	1076012	stress-sensitive restriction system protein 2 - Corynebacterium glutamicum (ATCC 13032) >gi|549844 restriction endonuclease which is stress-sensitive and ATP-dependent. It contains a typical ATP binding region	7.5
1093	882341	(U24702) LRP1 [Arabidopsis thaliana]	0.71
1094	3955011	(AJ005438) beta adrenoreceptor B	0.54
1095	1086900	(U41278) contains similarity to G beta repeats	1e-028
1096	4519908	(AB018106) HrSmad1/5 [Halocynthia roretzi]	6
1097	3043868	(U95835) extracellular protein Exp5 precursor	5.9
1098	2494294	NEUROGENIC LOCUS NOTCH 3 PROTEIN	3.5
1099	3879748	(Z72514) predicted using Genefinder; similar to collagen; cDNA EST EMBL:M89258 comes from this gene; cDNA EST EMBL:D68856 comes from this gene; cDNA EST yk232e11.3 comes from this gene; cDNA EST yk232e11.5 comes from this gene;...	0.079
1100	1123087	(U42436) C49H3.3 gene product [Caenorhabditis elegans]	5e-006
1101	3880809	(AL021483) similar to Probable rabGAP domains; cDNA EST EMBL:D34945 comes from this gene; cDNA EST EMBL:D27313 comes from this gene; cDNA EST EMBL:D34829 comes from this gene; cDNA EST EMBL:D27312 comes from this gene; cDNA EST... rabGAP domains; cDNA EST	3e-011
1105	1772652	(U70664) 2-keto-3-deoxygluconate kinase [Haloferax alicantei]	5.8
1106	113000	ACTIN BINDING PROTEIN	5.5
1107	2702276	(AC003033) putative beta-glucosidase [Arabidopsis thaliana]	4.2
1108	1504006	(D86966) similarto human ZFY protein. [Homo sapiens]	4.2
1109	2337833	(Z98604) hypothetical protein MLCB2052.27	1.8

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1110	3122952	TIPD PROTEIN >gi|2407788 (AF019236) TipD [Dictyostelium discoideum]	6e-019
1112	4049344	(AL034567) putative protein [Arabidopsis thaliana]	6.8
1113	2143767	glycoprotein - rat >gi|986943 (L08134) glycoprotein [Rattus norvegicus] norvegicus]	0.018
1116	200135	(M63849) 2'-5' oligoadenylate synthetase [Mus musculus]	7.9
1119	133135	MITOCHONDRIAL RIBOSOMAL PROTEIN VAR1 1-339) [Candida utilis]	9.7
1120	1580768	(X92688) NADH dehydrogenase [Pecten maximus]	4.4
1121	4587868	(AF069302) Orf2 [Pediococcus pentosaceus]	1.5
1123	3851496	(AF051933) cyclin T; positive elongation transcription factor b cyclin subunit [Drosophila melanogaster]	3.4
1131	3877133	(Z83109) predicted using Genefinder	6
1132	118864	DNA POLYMERASE (A PROTEIN) 2.7.7.7) - ground squirrel hepatitis virus >gi|325402	4.6
1133	415638	(U03388) cyclooxygenase 1 [Rattus rattus]	4.5
1134	4100099	(U93502) hypothetical protein 256 [Secale cereale]	2.7
1135	2130154	hypothetical protein 241 - maize chloroplast	1.2
1136	4521280	(AB011832) cytochrome c oxidase subunit I [Dicyema misakiense]	0.94
1137	2706875	(D85084) NCAM-180 [Cynops pyrrhogaster]	0.68
1138	746516	(U23517) D1022.7 [Caenorhabditis elegans] >gi|3258651 elegans]	0.061
1139	746516	(U23517) D1022.7 [Caenorhabditis elegans] >gi|3258651 elegans]	0.061
1140	1938549	(U97016) similar to drosophila Rlc1 gene product ribosomal protein L4 (YML4) (NID:g459259)	5e-017
1141	1938549	(U97016) similar to drosophila Rlc1 gene product ribosomal protein L4 (YML4) (NID:g459259)	3e-017
1142	3851703	(AF100421) p80 [Rattus norvegicus]	1e-056
1143	4191810	(AB006532) DNA helicase [Homo sapiens]	8e-066
1144	3851703	(AF100421) p80 [Rattus norvegicus]	8e-070
1163	82620	probable serine-type carboxypeptidase (EC 3.4.16.1) - wheat	9.7
1164	3879471	(Z69885) predicted using Genefinder	9.6
1165	1075011	mercury resistance regulatory protein KW20)	9.5
1166	4490715	(AL035680) putative protein [Arabidopsis thaliana]	9.3
1167	487418	(L20303) actin filament-associated protein [Gallus gallus]	7.6
1168	560610	trypsin inhibitor, WTI [Triticum aestivum=wheat, variety San Pastore, endosperm, Peptide, 71 aa]	7.5
1169	3322954	(AE001240) spermidine/putrescine ABC transporter, permease protein (potB) [Treponema pallidum]	7.5

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1170	1707179	(U80839) ZC204.15 gene product [Caenorhabditis elegans]	7.4
1171	209619	(J01901) major coat protein A [Adeno associated virus 2]	7.3
1172	1657233	(D88529) serine acetyltransferase serine acetyltransferase [Spinacia oleracea]	7.3
1173	722375	(U23139) similar to phospholipase ADRAB-B precursor	7.2
1174	138018	TAIL FIBER PROTEIN GP37 (RECEPTOR RECOGNIZING PROTEIN) >gi|76090|pir||TLBP74 tail fiber protein gp37 - phage T4 >gi|15374|emb|CAA24228| (V00863) gene 37 [coliphage T4] >gi|215887 (J02509) tail fiber protein 37 [Bacteriophage T4]	5.5
1175	1001217	(D64003) hypothetical protein	4.4
1176	1175410	HYPOTHETICAL 126.5 KD PROTEIN C31A2.16 IN CHROMOSOME I >gi|2130427|pir||S58108 hypothetical protein SPAC31A2.16 - fission yeast	4.4
1177	2829216	(AF044287) delta adaptin subunit of AP-3 [Drosophila melanogaster]	4.2
1178	1084374	histone-lysine N-methyltransferase (EC 2.1.1.43) large chain N-methyltransferase - garden pea carboxylase large subunit N-methyltransferase [Pisum sativum]	4.1
1179	567166	(L03172) This CDS feature is included to show the translation of the corresponding V_region. Presently translation qualifiers on V_region features are illegal.	3.8
1180	2492625	HYPOTHETICAL 49.3 KD PROTEIN C09G5.1 IN CHROMOSOME II >gi|3874104|emb|CAA86760|	3.2
1181	1065455	(U40410) coded for by C. elegans cDNA yk9e10.5; coded for by C. elegans cDNA yk9e10.3; multiple regions of similarity to EGF-like repeats and cysteine-rich repeats	2.6
1182	3406753	(AF068182) B cell linker protein BLNK [Mus musculus]	2.6
1183	1065455	(U40410) coded for by C. elegans cDNA yk9e10.5; coded for by C. elegans cDNA yk9e10.3; multiple regions of similarity to EGF-like repeats and cysteine-rich repeats	2.5
1184	4539761	(AF118391) salivary peroxidase	2.5
1185	101919	mating-type locus protein b3 - smut fungus	2.1
1186	329876	(M32084) polyprotein [Hepatitis C virus]	1.5
1187	3881059	(AL023844) similar to Ion transport proteins [Caenorhabditis elegans]	1.4
1188	2981221	(AF053091) eyelid [Drosophila melanogaster]	1.4
1189	4566750	(AF115773) basic helix-loop-helix transcription factor Ndr1b [Danio rerio]	1.4
1190	552072	(M13235) abl-like putative oncogene; putative	0.62
1191	1438951	(U61842) cutinase negative acting protein [Fusarium solani f. sp. pisi]	0.5

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1192	3875904	(Z70207) predicted using Genefinder; similar to collagen; cDNA EST EMBL:D65905 comes from this gene; cDNA EST EMBL:D65858 comes from this gene; cDNA EST EMBL:D69306 comes from this gene; cDNA EST EMBL:D65755 comes from this gen...	0.025
1193	3150503	(AF067217) contains similarity to myosin head (motor) domains (Pfam: myosin_head.hmm score: 602.72, 40.38 and 128.290) and phorbol esters/diacylglycerol binding domains (Pfam: DAG_PE-bind.hmm, score: 21.52 and 36.32)	0.002
1194	110849	proline-rich protein - mouse proline-rich protein [Mus musculus]	5e-005
1195	3435157	(AF049910) TACC1 [Homo sapiens]	7e-011
1196	3287336	(AF014903) NADH dehydrogenase subunit 2 [Pan troglodytes] >gi|3287338 (AF014904) NADH dehydrogenase subunit 2 [Pan troglodytes]	5e-011
1197	4226073	(AF125443) contains similarity to S. pombe phosphatidyl synthase (GB:Z28295) [Caenorhabditis elegans]	2e-011
1198	868241	(U29488) C56C10.3 gene product [Caenorhabditis elegans]	2e-011
1199	3894323	(AB020063) Keap1 [Mus musculus]	5e-012
1200	466102	PUTATIVE AMINOPEPTIDASE ZK353.6 IN CHROMOSOME III >gi|1078908|pir||S44657 ZK353.6 protein - Caenorhabditis elegans >gi|289760 (L15313) homology with leucine aminopeptidase; coded for by C. elegans cDNAs CE2F12 (GenBank: Z14714) and CE15D11 (GenBank: Z1451	3e-014
1201	3608372	(AF053768) brain specific cortactin-binding protein CBP90 [Rattus norvegicus]	2e-016
1202	3293547	(AF072709) putative oxidoreductase [Streptomyces lividans]	2e-019
1203	4567068	(AF125568) tumor suppressing STF cDNA 4 [Homo sapiens]	3e-031
1204	4507851	reserved >gi|3928762|dbj|BAA34703|	1e-048
1205	3746791	(AF081788) putative spliceosome associated protein [Homo sapiens] >gi|3985930|dbj|BAA34863| (AB020623) DAM1 [Homo sapiens]	4e-051
1206	3851703	(AF100421) p80 [Rattus norvegicus]	2e-064
1207	4519883	(AB017970) dipeptidyl peptidase III	3e-071
1245	2370558	(Z98763) putative Inositol polyphosphate phosphatase [Schizosaccharomyces pombe]	9.1
1246	1076815	NADH dehydrogenase subunit I - maize	8.3
1247	409711	(L25658) ORF [Blueberry scorch virus]	8.3

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1248	4323053	(AF098293) pyruvate decarboxylase	8.3
1249	2493794	C4B-BINDING PROTEIN BETA CHAIN PRECURSOR >gi|2143627|pir||S57960 C4BP protein beta chain precursor - rat >gi|899382|emb|CAA90392| (Z50052) C4BP beta chain, leader [Rattus norvegicus]	8.2
1250	1703342	APOLIPOPROTEIN D PRECURSOR	6.8
1251	133652	PROBABLE RNA-DIRECTED RNA POLYMERASE polymerase (EC 2.7.7.48) - southern bean mosaic virus mosaic virus]	6.6
1252	2128472	hypothetical protein MJ0749 - Methanococcus jannaschii >gi|1591462 (U67520) conserved hypothetical protein [Methanococcus jannaschii]	6.5
1253	2499265	NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 4 >gi|1182022|emb|CAA56534| (X80245) ND4 [Locusta migratoria]	6.4
1254	1098322	Ran/TC4-binding nucleopore protein [Homo sapiens]	5.3
1255	283518	homeotic protein smox-5 - fluke (Schistosoma mansoni) >gi|161110 (M85304) homeodomain protein	5.2
1256	119714	EXTENSIN PRECURSOR (CELL WALL HYDROXYPROLINE-RICH GLYCOPROTEIN) >gi|82169|pir||S06733 hydroxyproline-rich glycoprotein precursor - common tobacco >gi|19867|emb|CAA32090| (X13885) extensin (AA 1-620) [Nicotiana tabacum]	4.9
1257	1176529	HYPOTHETICAL 100.9 KD PROTEIN C34E10.3 IN CHROMOSOME III >gi|500726 (U10402) C34E10.3 gene product [Caenorhabditis elegans]	4.8
1258	116922	COPPER RESISTANCE PROTEIN B PRECURSOR >gi|77826|pir||B32018 copper resistance protein B precursor - Pseudomonas syringae pv. tomato	3.8
1259	1352916	HYPOTHETICAL 19.0 KD PROTEIN IN NNF1-STE24 INTERGENIC REGION >gi|1077909|pir||S57138 hypothetical protein YJR115w - yeast (Saccharomyces cerevisiae) >gi|1015833|emb|CAA89645| (Z49615) ORF YJR115w [Saccharomyces cerevisiae]	3.7
1260	184111	(M20677) Kruppel-related protein (AA at 172) [Homo sapiens]	3.7
1261	122137	BOLA CLASS I HISTOCOMPATIBILITY ANTIGEN, ALPHA CHAIN BL3-6 PRECURSOR antigen alpha chain precursor (BL3-6) - bovine	3.6
1262	1086822	(U41263) this gene lies in the intron of T19D12.4 and on the opposite strand; strong similarity to casein kinases and to C. elegans proteins C03C10.2, F41G3.5 and ZK507.1	3
1263	3257206	(AP000003) 338aa long hypothetical protein	3

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1264	4493896	(AL034558) predicted using hexExon; MAL3P2.18 (PFC0245c), Hypothetical protein, len: 3934 aa	2.8
1265	732330	GENERAL STRESS PROTEIN A Bacillus subtilis >gi|580866|emb|CAA51568| (X73124) ipa-12d [Bacillus subtilis] >gi|2636378|emb|CAB15869|	2.2
1266	4155225	(AE001499) putative ROD SHAPE-DETERMINING PROTEIN	2.1
1267	2224448	(AB001684) ORF54c [Chlorella vulgaris]	1.4
1268	3406654	(AF079369) transcriptional repressor TUP1 [Dictyostelium discoideum]	1.4
1269	3335561	(AF069736) PCAF associated factor 65 beta [Homo sapiens]	1.3
1270	2326171	(U62794) CDC42 GAP-related protein [Homo sapiens]	1.3
1271	3406654	(AF079369) transcriptional repressor TUP1 [Dictyostelium discoideum]	1.2
1272	2145956	probable phosphomannomutase (EC 5.4.2.8) - Mycobacterium leprae >gi|467178 (U00022) u0308b; L308_F1_13 [Mycobacterium leprae]	1
1273	2649256	(AE001012) GMP synthase (guaA-2) [Archaeoglobus fulgidus]	1
1274	3451437	(AL031350) putative secreted protein	0.76
1275	1653006	(D90910) hypothetical protein	0.21
1276	1001821	(D64005) nickel resistance [Synechocystis sp.]	0.14
1277	1123087	(U42436) C49H3.3 gene product [Caenorhabditis elegans]	0.013
1278	1123087	(U42436) C49H3.3 gene product [Caenorhabditis elegans]	0.0004
1279	183894	(M69054) insulin-like growth factor binding protein 6	7e-005
1280	3608372	(AF053768) brain specific cortactin-binding protein CBP90 [Rattus norvegicus]	9e-011
1281	3114818	(AJ005891) JM2 [Homo sapiens]	5e-011
1282	3608372	(AF053768) brain specific cortactin-binding protein CBP90 [Rattus norvegicus]	7e-016
1283	3608372	(AF053768) brain specific cortactin-binding protein CBP90 [Rattus norvegicus]	2e-016
1284	3649741	(AJ000281) mucin [Homo sapiens]	2e-031
1285	4240307	(AB020716) KIAA0909 protein [Homo sapiens]	1e-043
1286	4240307	(AB020716) KIAA0909 protein [Homo sapiens]	1e-043
1287	3649741	(AJ000281) mucin [Homo sapiens]	1e-047
1288	4557535	down-regulated in adenoma protein down-regulated in adenoma (DRA) - human >gi|291964 576-580, 579-583; acidic transcr. activ. domain 620-640,; homeobox motif 653-676 [Homo sapiens]	1e-060

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1324	3879589	(Z50875) Proline rich domain; cDNA EST EMBL:D35637 comes from this gene; cDNA EST yk322a3.5 comes from this gene; cDNA EST yk397b2.5 comes from this gene; cDNA EST yk348b11.5 comes from this gene; cDNA EST yk397b2.3 comes from ... >gi|3880965|emb|CAA15982	9.9
1325	3879505	(AL023816) T05G11.4 [Caenorhabditis elegans]	9.4
1326	1346035	FOS-RELATED ANTIGEN-1 >gi|998348	8
1327	2648784	(AE000981) dipeptide ABC transporter, dipeptide-binding protein (dppA) [Archaeoglobus fulgidus]	7.9
1328	142774	(L07023) delta-endotoxin [Bacillus thuringiensis]	7.9
1329	2648784	(AE000981) dipeptide ABC transporter, dipeptide-binding protein (dppA) [Archaeoglobus fulgidus]	7.9
1330	3874201	(Z81015) predicted using Genefinder	7.7
1331	2358287	(AF010404) ALR [Homo sapiens]	7.7
1332	3881262	(AL021175) Y6E2A.6 [Caenorhabditis elegans]	6
1333	974143	(L42542) RLIP76 protein [Homo sapiens]	6
1334	3287188	(Y10601) ankyrin-like protein [Homo sapiens]	6
1335	730684	UBIQUITIN--PROTEIN LIGASE RSP5 yeast (Saccharomyces cerevisiae) >gi|603364 (U18916) Rsp5p [Saccharomyces cerevisiae]	4.6
1336	1255865	(U53340) coded for by C. elegans cDNA yk39e8.5; weakly similar to C. elegans proteins F09G8.4 and F02E8.6	3.6
1337	2687999	(AE001123) B. burgdorferi predicted coding region BB0110	3.3
1338	623044	(L38896) This CDS feature is included to show the translation of the corresponding V_region. Presently translation qualifiers on V_region features are illegal	3.1
1339	987050	(X65335) lacZ [Cloning vector pSV-beta-Galactosidase Control]	2.7
1340	1136390	(D79986) similar to human DNA-binding protein 5. [Homo sapiens]	2.6
1341	3599395	(AF083072) histone H1 DNA binding protein [Cenarchaeum symbiosum]	1.4
1342	1144514	(U34781) Antho-LWamidII preprohormone [Anthopleura elegantissima] >gi|1586846|prf|2204411A prepro-hormone	1.2
1343	3406654	(AF079369) transcriptional repressor TUP1 [Dictyostelium discoideum]	0.98
1344	3132825	(AF063403) putative cytosine-5 DNA methyltransferase [Zea mays]	0.89
1345	1754989	(U47661) proline-rich protein PRP2 precursor [Lupinus luteus]	0.078

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1346	728834	!!!! ALU SUBFAMILY SB2 WARNING ENTRY	0.025
1347	1123087	(U42436) C49H3.3 gene product [Caenorhabditis elegans]	0.021
1348	3608372	(AF053768) brain specific cortactin-binding protein CBP90 [Rattus norvegicus]	1e-009
1349	4507029	sodium bicarbonate cotransporter 2 >gi|3097316|dbj|BAA25898| (AB012130) sodium bicarbonate cotransporter2 [Homo sapiens]	5e-016
1350	2781381	(AC004013) Similar to rabbit A-kinase-anchoring protein sapiens]	1e-029
1351	4584423	(AJ131693) AKAP450 protein [Homo sapiens]	3e-052
1359	1518135	(U66260) multidrug resistance related protein 1	5.2
1362	3450974	(AF082496) interleukin-2 [Marmota monax]	6.8
1363	1123087	(U42436) C49H3.3 gene product [Caenorhabditis elegans]	0.001
1364	119760	COAGULATION FACTOR X PRECURSOR 3.4.21.6) precursor - chicken >gi|222870|dbj|BAA00724|	2
1367	3861111	(AJ235272) unknown [Rickettsia prowazekii]	5.5
1370	117143	CYTOCHROME P450 1A1 (CYPIA1) rainbow trout >gi|213780 (M21310) cytochrome P450IA1	7.1
1371	3915910	HYPOTHETICAL 36.3 KD PROTEIN IN NRDC-MOBD INTERGENIC REGION >gi|1667570 (U76612) unknown	5.4
1372	1708230	HOMEOBOX PROTEIN ABDOMINAL-A	4.1
1373	3024292	RHODOPSIN >gi|2290717 (AF000947) rhodopsin [Sepia officinalis]	5.3
1374	2996206	(AF053723) region 2 capsular polysaccharide biosynthesis protein [Actinobacillus pleuropneumoniae]	2.3
1375	2228750	(U93868) RNA polymerase III subunit [Homo sapiens]	5e-011
1379	79960	hypothetical 30.5K protein - Enterococcus faecalis plasmid pAM-beta-1 >gi|3023044 (AF007787) orfC	2e-025
1380	465532	HYPOTHETICAL 14.2 KD PROTEIN IN BLAB 3'REGION >gi|282541|pir|C41855 orf3 - Streptomyces cacaoi >gi|217001|dbj|BAA00776| (D00937) regulatory protein for beta-lactamase [Streptomyces cacaoi]	5.7
1381	3913279	COAT PROTEIN PRECURSOR (CAPSID PROTEIN) >gi|535774 (L09205) capsid protein [Tobacco ringspot virus]	0.66
1389	4493762	(AL034368) predicted using hexExon; L779.1, Serine/threonine protein kinase, len: 1359 aa; Similarity to protein kinases. A.thaliana NPK1-related protein kinase (TR:O22041) BLAST score: 303, sum P(5) = 1.8e-21; 36% & 37% iden...	4.6

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1390	131002	PROLINE-RICH PROTEIN MP-3 >gi|200549	0.1
1391	632098	isp3 protein - fission yeast	4.5
1392	2496862	HYPOTHETICAL 6.1 KD PROTEIN C03B1.10 IN CHROMOSOME X >gi|1072242 (U40952) C03B1.10 gene product [Caenorhabditis elegans]	6e-006
1393	3851703	(AF100421) p80 [Rattus norvegicus]	4e-056
1399	4493762	(AL034368) predicted using hexExon; L779.1, Serine/threonine protein kinase, len: 1359 aa; Similarity to protein kinases. A.thaliana NPK1-related protein kinase (TR:O22041) BLAST score: 303, sum P(5) = 1.8e-21; 36% & 37% iden...	4.3
1400	129648	PAIRED BOX PROTEIN PAX-1	4.3
1401	4115789	(D89861) cytochrome C-type biogenesis protein CCMF [Cyanidioschyzon merolae]	1.9
1402	135514	T-CELL RECEPTOR BETA CHAIN PRECURSOR precursor (ANA 11) - rabbit	0.034
1403	1086833	(U41264) coded for by C. elegans cDNA CEESN26F; coded for by C. elegans cDNA CEESI89F; similar to 60S acidic ribosomal protein Po (L10) [Caenorhabditis elegans]	3e-009
1404	4104168	(AF033339) UNC-45 [Caenorhabditis briggsae]	7e-013
1410	1175805	HYPOTHETICAL PROTEIN HI1452 Haemophilus influenzae (strain Rd KW20) >gi|1574290	7.3
1411	1708230	HOMEOBOX PROTEIN ABDOMINAL-A	4.2
1412	127774	MYOSIN II HEAVY CHAIN, NON MUSCLE heavy chain [Dictyostelium discoideum]	0.56
1413	728833	!!!! ALU SUBFAMILY SB1 WARNING ENTRY	0.48
1414	3080645	(AC004611) Hsp27 ERE-TATA-binding protein [Homo sapiens]	3e-008
1415	3687476	(AL031786) putative atp dependent rna helicase [Schizosaccharomyces pombe]	1e-014
1416	4557535	down-regulated in adenoma protein down-regulated in adenoma (DRA) - human >gi|291964 576-580, 579-583; acidic transcr. activ. domain 620-640,; homeobox motif 653-676 [Homo sapiens]	5e-060
1421	2088648	(AF002109) hypothetical protein [Arabidopsis thaliana]	6.9
1422	1707768	(Y08256) orf c01038 [Sulfolobus solfataricus]	5.3
1423	3370996	(AB008674) mBlm [Mus musculus]	4
1424	3878128	(Z69663) Weak similarity to Cotton isocitrate lyase (SW:ACEA_GOSHI); cDNA EST EMBL:D33259 comes from this gene; cDNA EST EMBL:D35346 comes from this gene; cDNA EST EMBL:D36032 comes from this gene; cDNA EST EMBL:D73253 comes fr...	1.8

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1425	83996	hypothetical protein 1 (CYb-COII intergenic region) - Sauroleishmania tarentolae mitochondrion uncertain [Leishmania tarentolae]	1.8
1426	1322210	(U26347) immunogobulin kappa, VJ region [Homo sapiens]	1.4
1427	3043810	(U88273) NADH dehydrogenase subunit 4 [Sceloporus aeneus]	0.46
1428	3080645	(AC004611) Hsp27 ERE-TATA-binding protein [Homo sapiens]	0.0007
1429	4506223	proteasome (prosome, macropain) 26S subunit, non-ATPase, 13 >gi|3618343|dbj|BAA33214|	1e-066
1438	2944430	(AF050157) butyrophilin-like [Mus musculus]	8.9
1439	1652823	(D90908) hypothetical protein	3
1440	119714	EXTENSIN PRECURSOR (CELL WALL HYDROXYPROLINE-RICH GLYCOPROTEIN) >gi|82169|pir||S06733 hydroxyproline-rich glycoprotein precursor - common tobacco >gi|19867|emb|CAA32090| (X13885) extensin (AA 1-620) [Nicotiana tabacum]	0.9
1441	509813	(L29010) ORFB [Cryphonectria hypovirus]	0.78
1442	238617	(S64572) nonfibrillar collagen Partial, 907 aa] [Strongylocentrotus purpuratus]	0.2
1443	3522970	(U42390) Trio [Homo sapiens]	0.12
1449	3328726	(AE001303) ATP Synthase Subunit E [Chlamydia trachomatis]	8.6
1450	501174	(L33965) MHC class II protein [Morone saxatilis]	8.5
1451	2661685	(AL009199) hypothetical protein SC7B7.10	8.5
1452	1575684	(U70316) IonA [Dictyostelium discoideum]	8.4
1453	2128472	hypothetical protein MJ0749 - Methanococcus jannaschii >gi|1591462 (U67520) conserved hypothetical protein [Methanococcus jannaschii]	5
1454	1549329	(U52845) class IV chitinase EP3-1/H5 [Daucus carota]	4.9
1455	3845167	(AE001390) hypothetical protein [Plasmodium falciparum]	2.9
1456	2833306	PUTATIVE IMPORTIN ALPHA SUBUNIT for by C. elegans cDNA yk117h8.5; coded for by C. elegans cDNA yk8f10.5; coded for by C. elegans cDNA yk134a4.5; coded for by C. elegans cDNA yk53c4.5; coded for by C. elegans cDNA yk8f10.3; coded for by C. elegans cDNA yk1	1.7
1463	1731097	HYPOTHETICAL 34.2 KD PROTEIN F07F6.2 IN CHROMOSOME III >gi|746449 (U23486) No definition line found [Caenorhabditis elegans]	8.3
1464	4321805	(AF063232) variant 1 major surface glycoprotein [Pneumocystis carinii]	8.3

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1465	4557059	(AC007154) hypothetical protein	4.8
1466	139372	ENDOPROTEASE (LATE L3 23 KD PROTEIN) adenovirus type 7]	4.8
1467	8509	(X04813) CAD protein (AA 1 - 2236) [Drosophila melanogaster]	3.6
1468	422690	myosin-binding protein H - chicken	2e-005
1472	265108	(S54379) sucrose-phosphate synthase, SPS oleracea]	2.1
1473	2842704	HYPOTHETICAL 73.3 KD PROTEIN C6G9.14 IN CHROMOSOME I >gi|1644326|emb|CAB03616.1| pr otein [Schizosaccharomyces pombe]	1.6
1474	113109	NEURONAL ACETYLCHOLINE RECEPTOR PROTEIN, NON-ALPHA-3 CHAIN PRECURSOR (GFN-ALPHA-3) non alpha-3 chain precursor - goldfish >gi|212956 auratus]	0.7
1475	4557535	down-regulated in adenoma protein down-regulated in adenoma (DRA) - human >gi|291964 576-580, 579-583; acidic transcr. activ. domain 620-640,; homeobox motif 653-676 [Homo sapiens]	1e-051
1485	2315339	(AF016438) contains similarity to C4-type zinc fingers	9.9
1486	549664	HYPOTHETICAL 23.0 KD PROTEIN IN IXR1-TFA1 INTERGENIC REGION >gi|539152|pir||S37847 hypothetical protein YKL030w - yeast (Saccharomyces cerevisiae) >gi|486029|emb|CAA81864| (Z28029) ORF YKL030w [Saccharomyces cerevisiae]	4.4
1487	4204234	(AF035379) MADS-box protein 2 [Lolium temulentum]	0.51
1488	126390	LORICRIN >gi|110649|pir||A35628 loricrin - mouse >gi|198871 (M34398) loricrin [Mus musculus] >gi|520480 (U09189) loricrin [Mus musculus]	0.14
1489	4557535	down-regulated in adenoma protein down-regulated in adenoma (DRA) - human >gi|291964 576-580, 579-583; acidic transcr. activ. domain 620-640,; homeobox motif 653-676 [Homo sapiens]	4e-050
1492	1707768	(Y08256) orf c01038 [Sulfolobus solfataricus]	4.3
1493	4376203	(U35226) putative cytochrome P-450	4.3
1494	3721884	(AB016248) sterol-C5-desaturase [Mus musculus]	4.2
1495	131000	ACIDIC PROLINE-RICH PROTEIN PRECURSOR salivary protein [Rattus norvegicus]	3.3
1496	3123638	(AJ223069) TCF-3 protein [Mus musculus]	0.49
1497	854065	(X83413) U88 [Human herpesvirus 6]	5e-010

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1501	126679	GALECTIN-3 (GALACTOSE-SPECIFIC LECTIN 3) (MAC-2 ANTIGEN) (IGE-BINDING PROTEIN) (35 KD LECTIN) (CARBOHYDRATE BINDING PROTEIN 35) (CBP 35) GALACTOSIDE-BINDING LECTIN) >gi|1072481|pir||A28651 galactose-specific lectin - mouse 1-264) [Mus musculus]	0.21
1502	4106562	(Z83819) dJ146H21.2 (similar to CYTOCHROME B-245 HEAVY CHAIN) [Homo sapiens]	1e-011
1504	265108	(S54379) sucrose-phosphate synthase, SPS oleracea]	1.6
1505	1177322	(X95466) CPG2 protein [Rattus norvegicus]	0.0002
1507	3878057	(Z99942) similar to von Willebrand factor type A domain; cDNA EST yk412d4.5 comes from this gene; cDNA EST yk412d4.3 comes from this gene [Caenorhabditis elegans]	0.039
1509	2394509	(AF024503) No definition line found [Caenorhabditis elegans]	6.1
1510	2827872	(U79229) NADH dehydrogenase subunit F [Tradescantia zebrina]	4.6
1511	3004653	(AF017777) tweety [Drosophila melanogaster]	3.7
1512	3873773	(Z83316) Similarity to S.pombe hypothetical protein C2F7.02C (SW:Q09695)	1.6
1513	586295	HYPOTHETICAL 33.8 KD PROTEIN IN YSW1-RIB7 INTERGENIC REGION >gi|626526|pir||S46023 hypothetical protein YBR152w - yeast (Saccharomyces cerevisiae) >gi|536480|emb|CAA85111| (Z36021) ORF YBR152w [Saccharomyces cerevisiae]	0.081
1519	3882147	(AB018256) KIAA0713 protein [Homo sapiens]	9.9
1520	2117181	(Z95584) mcr [Mycobacterium tuberculosis]	7.3
1521	1169862	G-BOX BINDING FACTOR 3 >gi|600863 thaliana]	6
1522	3257950	(AP000006) 236aa long hypothetical protein	6
1523	4138677	(AJ009814) polymerase [Viral hemorrhagic septicemia virus]	5.9
1524	2736413	(AF039044) No definition line found [Caenorhabditis elegans]	5.7
1525	2058691	(U94836) ERPROT 213-21 [Homo sapiens]	2.7
1526	347124	(L20967) phosphodiesterase [Homo sapiens]	2
1527	3913674	FERRIC REDUCTASE TRANSMEMBRANE COMPONENT 3 PRECURSOR >gi|2132959|pir||S67293 probable membrane protein YOR381w - yeast (Saccharomyces cerevisiae) >gi|1420821|emb|CAA99713| (Z75289) ORF YOR381w [Saccharomyces cerevisiae]	2

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1528	1086636	(U41013) similar to phosphoribosylaminoimidazolecarboxamide formyltransferase [Caenorhabditis elegans]	0.9
1529	2495706	HYPOTHETICAL PROTEIN KIAA0136 product is novel. [Homo sapiens]	0.86
1530	4007775	(AL034486) hypothetical fungal binuclear cluster domain protein [Schizosaccharomyces pombe]	0.65
1531	113671	!!!! ALU CLASS F WARNING ENTRY !!!!	0.39
1532	4098124	(U73522) AMSH [Homo sapiens]	8e-008
1533	1174546	SYNAPTOTAGMIN II	5e-010
1534	4139228	(AF109134) 7-60 [Homo sapiens] >gi|4139272 (AF112980) 7-60 [Homo sapiens]	5e-044
1535	2564328	(AB006628) KIAA0290 [Homo sapiens]	3e-050
1536	3668141	(AJ007398) PBK1 protein [Homo sapiens]	3e-057
1544	3256484	(AP000001) 158aa long hypothetical protein [Pyrococcus horikoshii]	9.1
1545	2735945	(AF015193) NADH dehydrogenase subunit 3 [Onchocerca volvulus]	7.5
1546	3983015	(AF096056) antigen receptor [Ginglymostoma cirratum]	3.2
1547	1552169	(D42138) PIG-B [Homo sapiens]	3
1548	2440180	(Z99531) ubiquitin system protein	2.4
1549	3882159	(AB018262) KIAA0719 protein [Homo sapiens]	1.8
1550	3004653	(AF017777) tweety [Drosophila melanogaster]	1.3
1551	77657	hypothetical 30.1K protein - Pseudomonas aeruginosa	0.26
1552	4098124	(U73522) AMSH [Homo sapiens]	0.002
1553	3979818	(Z49967) cDNA EST EMBL:T00743 comes from this gene; cDNA EST EMBL:D69356 comes from this gene; cDNA EST EMBL:D65790 comes from this gene; cDNA EST EMBL:D70463 comes from this gene; cDNA EST EMBL:D66620 comes from this gene; cDN...	0.001
1554	3550295	(AJ009947) putative ATPase [Homo sapiens]	1e-008
1555	4507507	UNKNOWN >gi|3929583 (AF098162) timeless homolog [Homo sapiens]	1e-035
1562	3152567	(AC002986) Contains similarity to membrane associated salt-inducible protein gb|AF007269 from A. thaliana.	8.4
1563	4493978	(AL034559) predicted using hexExon; MAL3P7.21 (PFC0960c), Hypothetical protein, len: 1929 aa	5
1564	1169862	G-BOX BINDING FACTOR 3 >gi|600863 thaliana]	4.7
1565	140550	HYPOTHETICAL 259 KD PROTEIN (ORF 2136) >gi|81341|pir||A05037 hypothetical protein 2136 - liverwort (Marchantia polymorpha) chloroplast polymorpha]	3.7
1566	2224354	(AB001684) ORF104 [Chlorella vulgaris]	0.76

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1567	106322	hypothetical protein (L1H 3' region) - human	0.53
1568	3522937	(AC004411) unknown protein [Arabidopsis thaliana]	0.4
1569	4097433	(U61084) phorbolin 3 [Homo sapiens]	4e-017
1578	1944122	(AB002531) SSU1p [Saccharomyces cerevisiae]	9.7
1579	4127662	(Y11176) fructosidase [Cichorium intybus]	5.3
1580	119515	EPENDYMIN I PRECURSOR (EPD-I) rainbow trout >gi|213412 (M93697) ependymin	4.4
1581	1439625	(U64598) weakly similar to S. cervisiae PTM1 precursor	2.6
1582	2183261	(AF002133) MAV264 [Mycobacterium avium]	2.3
1583	2388564	(AC000098) ESTs gb|AA042402,gb|ATTS1380 come from this gene. [Arabidopsis thaliana]	1.9
1584	1381091	(U51723) V-SERA 1 [Plasmodium vivax]	9.8
1587	2496317	HYPOTHETICAL PROTEIN MG144 HOMOLOG Mycoplasma pneumoniae (SGC3) (ATCC 29342) >gi|1674380 genitalium [Mycoplasma pneumoniae]	0.65
1588	2496317	HYPOTHETICAL PROTEIN MG144 HOMOLOG Mycoplasma pneumoniae (SGC3) (ATCC 29342) >gi|1674380 genitalium [Mycoplasma pneumoniae]	0.64
1589	3184073	(AL023779) hypothetical protein	8e-009
1590	3560165	(AL031525) hypothetical protein	3.7
1612	133594	RNA-DIRECTED RNA POLYMERASE (ORF1B) 2.7.7.48) - avian infectious bronchitis virus (strain Beaudette) >gi|292953 (M95169) pol protein [Avian infectious bronchitis virus] >gi|331173 (M94356) ORF 1b encodes a polypeptide of potential mol. wt. 300,000.	9.7
1613	3043622	(AB011121) KIAA0549 protein [Homo sapiens]	6.8
1614	72870	translation elongation factor eEF-1 alpha chain factor 1-alpha (AA 1 - 461) [Mus musculus]	5.6
1615	2315365	(AF016441) No definition line found [Caenorhabditis elegans]	5.3
1616	586120	TRICHOHYALIN >gi|539701|pir||A45973 trichohyalin - human >gi|292336 (L09190) trichohyalin	4.9
1617	281206	nuclear antigen EBNA-3B - human herpesvirus 4	3.9
1618	2146731	FK506-binding protein - Arabidopsis thaliana	3.5
1619	3876045	(Z81506) similar to Lectin C-type domain short and long forms, CUB domain [Caenorhabditis elegans]	3.5
1620	2833191	LACCASE 4 PRECURSOR precursor - Rhizoctonia solani >gi|1150568|emb|CAA91042|	3.3
1621	2981221	(AF053091) eyelid [Drosophila melanogaster]	3.2
1622	1118179	(U42304) chitin synthase [Phytophthora capsici]	2.9
1623	1351576	HYPOTHETICAL PROTEIN MG419 Mycoplasma genitalium (SGC3)	2.9
1624	320309	AL2 protein - beet curly top virus >gi|210683	2.5

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1625	1523997	(X99510) CDK4/6 kinase [Drosophila melanogaster]	2.1
1626	3646450	(AL031603) conserved hypothetical protein.	2
1627	3599342	(AF081112) ORF2 [Mus musculus domesticus]	1.9
1628	2114473	(U96963) p140mDia [Mus musculus]	1.5
1629	3638957	(AC004877) sco-spondin-mucin-like; similar to P98167 uncertain [Homo sapiens]	1
1630	2558942	(AF024714) interferon-inducible protein [Homo sapiens]	0.93
1631	3257709	(AP000005) 115aa long hypothetical protein	0.69
1632	346430	adenylylcyclase type V-alpha - dog >gi|290082	0.46
1633	4263788	(AC006068) hypothetical protein	0.3
1634	2134199	myosin I beta - bullfrog >gi|602138 (U14549) myosin I beta [Rana catesbeiana] >gi|603692 (U14382) myosin I beta [Rana catesbeiana]	0.044
1635	2134199	myosin I beta - bullfrog >gi|602138 (U14549) myosin I beta [Rana catesbeiana] >gi|603692 (U14382) myosin I beta [Rana catesbeiana]	0.036
1636	3776027	(AJ010475) RNA helicase [Arabidopsis thaliana]	2e-006
1637	134787	ATP-DEPENDENT RRNA HELICASE SPB4 cerevisiae] >gi|836754|dbj|BAA09238| (D50617) rRNA helicase [Saccharomyces cerevisiae] SPB4 [Saccharomyces cerevisiae]	1e-015
1638	134787	ATP-DEPENDENT RRNA HELICASE SPB4 cerevisiae] >gi|836754|dbj|BAA09238| (D50617) rRNA helicase [Saccharomyces cerevisiae] SPB4 [Saccharomyces cerevisiae]	4e-016
1639	4454698	(AF070661) HSPC005 [Homo sapiens]	2e-016
1640	4185892	(AL033125) 1-evidence=predicted by content; 1-method=genefinder;084; 1-evidence_end; 2-evidence=predicted by match; 2-match_accession=SWISS-PROT:P38205; 2-match_description=HYPOTHETICAL 77.9 KD PROTEIN IN RRN10-MCM2 INTERGENIC ...	6e-021
1641	3043548	(AB011084) KIAA0512 protein [Homo sapiens]	9e-041
1643	2435574	(AF026209) similar to C. elegans olfactory receptor ODR-10 (NID:g1235900) [Caenorhabditis elegans]	7.3
1644	3880252	(Z82055) similar to Zinc finger, C4 type	5.7
1645	3023744	PUTATIVE FLAGELLA-RELATED PROTEIN C	4.5
1646	267478	HYPOTHETICAL 64.3 KD PROTEIN IN RPS3 3'REGION (ORF516) >gi|419731|pir||S34525 hypothetical protein 516 (rps3 3' region) - Euglena gracilis chloroplast >gi|2673852|emb|CAA50104| (X70810) orf516; ttg start [Euglena gracilis] >gi|2673884|emb|CAA77921| gracil	2

Table 2B Nearest Neighbor (BlastX vs Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1647	82551	hypothetical 237 protein (psbA 5' region) - rye chloroplast (fragment)	0.49
1648	1255792	(U51993) similar drosophila lethal (2) giant larvae protien (SP:Q08470) [Caenorhabditis elegans]	0.09
1663	627837	All-1 protein +GTE form - mouse (fragment)	9.6
1664	4115789	(D89861) cytochrome C-type biogenesis protein CCMF [Cyanidioschyzon merolae]	6.3
1665	942618	(U31081) MnxB [Bacillus sp.]	6
1666	220579	(D00570) open reading frame (196 AA) [Mus musculus]	5.8
1667	2120082	hypothetical protein II (retroposon LINE-1)	4.9
1668	2120082	hypothetical protein II (retroposon LINE-1)	4.8
1669	862343	(L10908) Gcap1 gene product [Mus musculus] marker protein [Mus musculus]	4.6
1670	1168540	ARGININOSUCCINATE SYNTHASE argininosuccinate synthetase (argG) homolog - Haemophilus influenzae (strain Rd KW20) >gi|1574583	4.5
1671	160385	(M63277) malaria antigen [Plasmodium falciparum]	4
1672	1177607	(X92485) pva1 [Plasmodium vivax]	3.8
1673	2497678	ZYXIN >gi|1430883|emb|CAA67510|	2.5
1674	4049518	(AL031852) conserved hypothetical protein	2.1
1675	135514	T-CELL RECEPTOR BETA CHAIN PRECURSOR precursor (ANA 11) - rabbit	0.55
1676	729942	LIPASE 1 PRECURSOR (TRIACYLGLYCEROL LIPASE) >gi|538817|pir|A47081 triacylglycerol lipase	0.45
1677	4503629	coagulation factor XII (Hageman factor) >gi|119763|sp|P00748|FA12_HUMAN COAGULATION FACTOR XII PRECURSOR (HAGEMAN FACTOR) (HAF) 3.4.21.38) precursor - human >gi|180357 (M17466) coagulation factor XII [Homo sapiens]	0.27
1678	1708392	CASPASE-5 PRECURSOR (ICH-3 PROTEASE) (TY PROTEASE) (ICE(REL)-III) enzyme ICErel-III - human >gi|903936 (U28015) cysteine protease [Homo sapiens]	4e-006
1679	3550295	(AJ009947) putative ATPase [Homo sapiens]	1e-008
1680	3875400	(Z73906) cDNA EST EMBL:M88866 comes from this gene [Caenorhabditis elegans]	1e-009
1681	3874685	(Z78539) Similarity to S.pombe hypothetical protein C4G8.04 (SW:YAD4_SCHPO); cDNA EST EMBL:D27846 comes from this gene; cDNA EST EMBL:D27845 comes from this gene; cDNA EST yk202h7.3 comes from this gene; cDNA EST yk202h7.5 come...	6e-010

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1682	3979818	(Z49967) cDNA EST EMBL:T00743 comes from this gene; cDNA EST EMBL:D69356 comes from this gene; cDNA EST EMBL:D65790 comes from this gene; cDNA EST EMBL:D70463 comes from this gene; cDNA EST EMBL:D66620 comes from this gene; cDN...	2e-015
1683	4584877	(AF068302) choline/ethanolaminephosphotransferase [Homo sapiens]	5e-020
1685	3914503	ASPARTATE CARBAMOYLTRANSFERASE 2 PRECURSOR (ASPARTATE TRANSCARBAMYLASE 2) (ATCASE 2) sativum]	9.9
1686	1845893	(U69426) envelope glycoprotein [Human immunodeficiency virus type 1]	9.7
1687	1730629	HYPOTHETICAL 43.0 KD PROTEIN B0361.6 IN CHROMOSOME III >gi|458954 (U00031) similar to H. marismortui hypothetical 23.1 kd protein in HMAL3 5' region [Caenorhabditis elegans]	5e-014
1690	2133580	gag polyprotein - red flour beetle retrotransposon Woot >gi|805076 (U09586) ORF 1	1.1
1695	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	6
1696	111816	probable pol polyprotein-related protein 4 - rat >gi|56590|emb|CAA37647| (X53581) ORF4 [Rattus norvegicus]	5.3
1697	1517923	(U51117) ascospore maturation 1 protein [Neurospora crassa]	5.3
1698	2924552	(AL022018) 1-evidence=predicted by content; 1-method=genefinder;084; 1-method_score=165.48; 1-evidence_end; 2-evidence=predicted by match; 2-match_accession=AA264666; 2-match_description=LD08351.5prime LD Drosophila melanogaste...	6e-012
1699	1663706	(D87685) similar to human transcription factor TFIIS (S34159). [Homo sapiens]	2e-014
1700	3879850	(Z81592) predicted using Genefinder	3e-034
1707	3184085	(AL023781) cytochrome c oxidase polypeptide v precursor [Schizosaccharomyces pombe]	8.7
1708	3845206	(AE001400) novel protein kinase [Plasmodium falciparum]	3.9
1709	283435	hypothetical protein DGF-1 - Trypanosoma cruzi cruzi]	3
1710	3329623	(AF078790) No definition line found [Caenorhabditis elegans]	1.3
1711	2459999	(AF013108) tubulin Uni3 [Chlamydomonas reinhardtii]	0.32

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1712	1705447	BACTENECIN 7 PRECURSOR (BAC7) aries]	0.26
1713	3043596	(AB011108) KIAA0536 protein [Homo sapiens]	4e-022
1714	3879850	(Z81592) predicted using Genefinder	3e-033
1724	987050	(X65335) lacZ [Cloning vector pSV-beta-Galactosidase Control]	7.6
1725	1334582	(X55026) ORF16; no ATG start codon	6.8
1726	2981631	(AB012223) ORF2 [Canis familiaris]	5.2
1727	628300	gene F protein - rinderpest virus virus]	4.8
1728	4008417	(Z77669) Similarity to Human aminopeptidase N (SW:AMPN_HUMAN); cDNA EST EMBL:D36412 comes from this gene; cDNA EST EMBL:D37688 comes from this gene; cDNA EST EMBL:D34550 comes from this gene; cDNA EST EMBL:D33568 comes from thi...	3.9
1729	1170083	PROBABLE GLOBAL TRANSACTIVATOR transactivator-like protein [Autographa californica nucleopolyhedrovirus]	3.4
1730	3757727	(AL022727) dJ80I19.7 (olfactory receptor-like protein (hs6M1-3)) [Homo sapiens]	3.3
1731	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	1.2
1732	130702	LARGE STRUCTURAL PHOSPHOPROTEIN PHOSPHOPROTEIN) (BPP) >gi|73955|pir||XPBEA9 large structural phosphoprotein pp150 - human cytomegalovirus phosphoprotein 150 [Human cytomegalovirus]	0.97
1733	1706571	EPITHELIAL CHLORIDE CHANNEL PROTEIN calcium-activated chloride channel [Bos taurus]	0.87
1734	2981631	(AB012223) ORF2 [Canis familiaris]	0.56
1735	1280072	(U55366) coded for by C. elegans cDNA yk85a2.5; coded for by C. elegans cDNA yk85a2.3; Similar to cuticlin	0.44
1736	2496862	HYPOTHETICAL 6.1 KD PROTEIN C03B1.10 IN CHROMOSOME X >gi|1072242 (U40952) C03B1.10 gene product [Caenorhabditis elegans]	0.001
1737	2228750	(U93868) RNA polymerase III subunit [Homo sapiens]	1e-007
1738	4503511	UNKNOWN >gi|3264861 (U97670) eukaryotic translation initiation factor eIF3, p35 subunit [Homo sapiens]	4e-031
1739	4503511	UNKNOWN >gi|3264861 (U97670) eukaryotic translation initiation factor eIF3, p35 subunit [Homo sapiens]	1e-032
1740	113667	!!!! ALU CLASS B WARNING ENTRY !!!!	5.3

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1742	2736375	(AF039040) No definition line found [Caenorhabditis elegans]	6
1743	2736375	(AF039040) No definition line found [Caenorhabditis elegans]	3.4
1744	1002672	(U30261) G protein beta subunit-like; Method: conceptual translation supplied by author [Schistosoma mansoni]	5e-024
1752	4200151	(AJ011538) hypothetical protein virus]	3.9
1753	134528	SLP1 PROTEIN (VACUOLAR PROTEIN SORTING PROTEIN 33) >gi|101624|pir||A34708 SLP1 protein SLP1 protein [Saccharomyces cerevisiae] >gi|173185	1.6
1754	1175386	HYPOTHETICAL 37.7 KD PROTEIN C18B11.06 IN CHROMOSOME I >gi|2130289|pir||S58305 hypothetical protein SPAC18B11.06 - fission yeast pombe]	0.13
1756	2909528	(AL021932) PPE [Mycobacterium tuberculosis]	4.9
1760	3876797	(Z81531) cDNA EST EMBL:D66579 comes from this gene; cDNA EST EMBL:D70408 comes from this gene; cDNA EST yk263d3.5 comes from this gene; cDNA EST yk275c1.5 comes from this gene; cDNA EST EMBL:C10270 comes from this gene [Caenorh. .	3.9
1770	3608418	(AF086634) cyclin B [Dreissena polymorpha]	8.9
1771	416868	CYTOKINE RECEPTOR COMMON BETA CHAIN PRECURSOR >gi|110595|pir||A35782 cytokine receptor common beta chain precursor - mouse >gi|309101 (M34397) interleukin 3 receptor-like protein (AIC2B) precursor	4.3
1772	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	2.9
1773	728834	!!!! ALU SUBFAMILY SB2 WARNING ENTRY	1.9
1774	728836	!!!! ALU SUBFAMILY SP WARNING ENTRY	0.3
1775	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	0.001
1776	3879850	(Z81592) predicted using Genefinder	2e-037
1777	4155993	(AE001560) putative [Helicobacter pylori J99]	1.4
1782	225047	reverse transcriptase related protein [Homo sapiens]	2.2
1790	3785977	(AC005560) putative growth regulator protein	9.4
1791	3257681	(AP000005) 617aa long hypothetical prolyl endopeptidase [Pyrococcus horikoshii]	7.8
1792	2317972	(U97553) capsid protein [murine herpesvirus 68]	1.5
1793	1085738	cytochrome-c oxidase (EC 1.9.3.1) chain I - Trypanoplasma borreli mitochondrion (SGC6) >gi|563140 borreli]	0.014
1794	4493973	(AL034559) predicted using hexExon; MAL3P7.14 (PFC0925w), Hypothetical protein, len: 489 aa	0.002

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1800	461796	CYTOCHROME C OXIDASE POLYPEPTIDE III honeybee mitochondrion (SGC4) >gi|552443 (L06178) cytochrome oxidase subunit 3 [Apis mellifera ligustica]	9.1
1801	1850592	(U88295) carnitine palmitoyltransferase II [Rattus norvegicus]	9
1802	207854	(M35837) alpha-amylase/alpha-galactosidase fusion protein	8.7
1803	2136989	Ksp-cadherin - rabbit >gi|902886 (U28945) Ksp-cadherin [Oryctolagus cuniculus] cuniculus]	3.4
1804	288448	(X06487) bcl2-Ig fusion gene [Homo sapiens]	3.4
1805	1657752	(U62325) FE65-like protein [Homo sapiens]	2.1
1806	2981631	(AB012223) ORF2 [Canis familiaris]	5e-007
1807	4502103	annexin 31 XXXI) [Homo sapiens]	1e-043
1808	2149830	(U92864) maturase [Quercus rubra]	9.6
1809	2981631	(AB012223) ORF2 [Canis familiaris]	0.046
1810	728832	!!!! ALU SUBFAMILY SB WARNING ENTRY	0.035
1813	3649769	(Z98547) predicted using hexExon; MAL3P3.17 (PFC0420w), Calcium-dependent protein kinase, len: 591 aa; Similarity to calcium-dependent protein kinases. P.falciparum calcium-dependent protein kinase CDPK2 (TR:O15865) BLAST Sco...	2.1
1814	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	1.6
1815	197968	(M26361) LINE/Ig H-chain fusion protein [Mus musculus]	0.036
1816	2496862	HYPOTHETICAL 6.1 KD PROTEIN C03B1.10 IN CHROMOSOME X >gi|1072242 (U40952) C03B1.10 gene product [Caenorhabditis elegans]	0.001
1817	135514	T-CELL RECEPTOR BETA CHAIN PRECURSOR precursor (ANA 11) - rabbit	0.0006
1818	3043596	(AB011108) KIAA0536 protein [Homo sapiens]	4e-016
1821	728838	!!!! ALU SUBFAMILY SX WARNING ENTRY	7
1822	1177607	(X92485) pva1 [Plasmodium vivax]	0.23
1823	106323	hypothetical protein (L1H 5' region) - human	0.071
1824	2981631	(AB012223) ORF2 [Canis familiaris]	2e-009
1825	1086860	(U41272) Similar to man(9)-alpha-mannosidase.	1e-032
1829	2258350	(AF007261) SecY-type transporter protein [Reclinomonas americana]	2.9
1830	1169643	FMRFAMIDE-RELATED NEUROPEPTIDES PRECURSOR >gi|416208 (U03137) neuropeptide precursor FMRFamide-related peptide [Lymnaea stagnalis]	0.026

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1834	585424	LIPOATE-PROTEIN LIGASE A 6.3.4.-) A - Escherichia coli >gi|504496 (L27665) lipoate-protein ligase A [Escherichia coli] >gi|537226	7.1
1835	2981631	(AB012223) ORF2 [Canis familiaris]	0.044
1841	4584540	(AL049608) putative protein [Arabidopsis thaliana]	7.3
1842	4493975	(AL034559) predicted using hexExon; MAL3P7.17 (PFC0940c), Hypothetical protein, len: 807 aa	3
1843	343539	(M14820) NADH dehydrogenase subunit 4 [Trypanosoma brucei]	1.7
1844	3335138	(AF047441) RNA polymerase I 40kD subunit [Homo sapiens]	1
1852	2612897	(AF015825) hypothetical ABC transporter [Bacillus subtilis] >gi|2633579|emb|CAB13082| (Z99110) similar to amino acid ABC transporter (ATP-binding protein)	5.9
1853	728836	!!!! ALU SUBFAMILY SP WARNING ENTRY	1.2
1854	113668	!!!! ALU CLASS C WARNING ENTRY !!!!	0.17
1855	728836	!!!! ALU SUBFAMILY SP WARNING ENTRY	0.05
1856	106323	hypothetical protein (L1H 5' region) - human	0.048
1857	2981631	(AB012223) ORF2 [Canis familiaris]	0.0002
1859	729785	HEXOSE TRANSPORTER HXT8 YJL214w - yeast (Saccharomyces cerevisiae) cerevisiae] >gi|1015600|emb|CAA89511| (Z49489) ORF YJL214w [Saccharomyces cerevisiae]	0.12
1861	1791243	(U83119) ORF2 consensus sequence encoding endonuclease and reverse transcriptase minus RNaseH [Rattus norvegicus]	4e-006
1862	854065	(X83413) U88 [Human herpesvirus 6]	2e-006
1863	1707274	(U80931) strong similarity to class-III of pyridoxal-phoshate-dependent aminotransferases	3e-032
1871	4049828	(AF063866) ORF MSV145 hypothetical protein [Melanoplus sanguinipes entomopoxvirus]	5.6
1872	1109853	(U41538) weak similarity to the S. cerevisiae activator 1 05 KD subunit (replication factor C 95 KD subunit)	4.5
1873	113668	!!!! ALU CLASS C WARNING ENTRY !!!!	3.6
1874	1684995	(U20663) NADH dehydrogenase subunit [Encyclia tampensis]	1.6
1875	3599325	(AF081106) ORF1 [Mus musculus domesticus]	0.36
1876	160379	(M63274) malaria antigen [Plasmodium falciparum]	0.16
1877	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	0.12
1878	2134199	myosin I beta - bullfrog >gi|602138 (U14549) myosin I beta [Rana catesbeiana] >gi|603692 (U14382) myosin I beta [Rana catesbeiana]	0.036
1879	1872200	(U22376) alternatively spliced product using exon 13A	0.009

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1880	1938524	(U97012) contains similarity to a ground domain, also weakly similar to drosophila fork head domain transcription factor SLP1 (SP:P32030) [Caenorhabditis elegans]	0.17
1882	3510507	(AF032382) metalloprotease-disintegrin [Xenopus laevis]	0.77
1883	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	0.33
1884	854065	(X83413) U88 [Human herpesvirus 6]	1e-007
1886	728833	!!!! ALU SUBFAMILY SB1 WARNING ENTRY	7.4
1887	1353178	PUTATIVE SERINE/THREONINE PROTEIN PHOSPHATASE C27B7.6 IN CHROMOSOME IV serine/threonine protein phosphatase [Caenorhabditis elegans]	7.2
1888	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	7e-009
1890	435942	(U04295) DNA-binding factor of bZIP class [Oryza sativa]	1
1891	728832	!!!! ALU SUBFAMILY SB WARNING ENTRY	0.94
1892	3599347	(AF081114) ORF2 [Mus musculus domesticus]	0.55
1893	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	0.056
1894	1196432	(M22333) unknown protein [Homo sapiens]	0.002
1895	728838	!!!! ALU SUBFAMILY SX WARNING ENTRY	0.004
1901	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	8
1902	3646450	(AL031603) conserved hypothetical protein.	7e-028
1903	2213560	(Z97052) hypothetical protein	5e-026
1905	3002527	(AF010144) neuronal thread protein AD7c-NTP [Homo	0.066
1906	2072977	(U93574) putative p150 [Homo sapiens]	0.022
1907	728835	!!!! ALU SUBFAMILY SC WARNING ENTRY	0.019
1908	4153886	(AB013357) 49 kDa zinc finger protein [Mus musculus]	2e-005
1910	2072974	(U93573) p40 [Homo sapiens]	2
1911	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	0.011
1914	4572297	(AF071799) T-cell surface glycoprotein CD4 precursor [Delphinapterus leucas]	6
1915	1350904	RIBOSOME RECYCLING FACTOR (RIBOSOME RELEASING FACTOR) (RRF) >gi|1361841|pir||A64248 ribosome releasing factor - Mycoplasma genitalium (SGC3) releasing factor (frr) [Mycoplasma genitalium]	3.7
1916	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	1.4
1917	728832	!!!! ALU SUBFAMILY SB WARNING ENTRY	0.0006
1918	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	4e-005
1919	1791243	(U83119) ORF2 consensus sequence encoding endonuclease and reverse transcriptase minus RNaseH [Rattus norvegicus]	4e-009
1920	126295	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG	0.006
1921	348317	ATPase 6 - Sauroleishmania tarentolae	7.7

Table 2B Nearest Neighbor (BlastX vs Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1923	1723547	HYPOTHETICAL 61.8 KD PROTEIN C12B10.03 IN CHROMOSOME I >gi|1262416|emb|CAA94693|	8.6
1924	1177607	(X92485) pva1 [Plasmodium vivax]	4.9
1925	3068583	(AF000580) Rep-like [Dictyostelium discoideum]	2.4
1926	2120082	hypothetical protein II (retroposon LINE-1)	0.21
1927	1335198	(X03145) pot. ORF III [Homo sapiens]	0.0003
1930	2134328	ECH - chicken >gi|1037160|dbj|BAA08364|	8.3
1931	4502377	B-cell growth factor 1 (12kD)	0.094
1932	3417289	(U95740) Unknown gene product [Homo sapiens]	0.065
1933	565080	(U14550) SThM [Homo sapiens]	0.006
1934	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	7e-006
1935	3649741	(AJ000281) mucin [Homo sapiens]	5e-020
1936	3551821	(AF058803) mucin 4 [Homo sapiens]	8e-021
1937	4519443	(AB017430) kinesin-like DNA binding protein [Homo sapiens]	3e-029
1939	1710216	(U79260) unknown [Homo sapiens]	1e-005
1940	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	5e-008
1942	4494012	(AL034559) predicted using hexExon; MAL3P7.32 (PFC1010w), Hypothetical protein, len: 1322 aa	4.5
1943	220578	(D00570) open reading frame (251 AA) [Mus musculus]	0.077
1944	2731377	(U28739) similar to alcohol dehydrogenase/ribitol dehydrogenase [Caenorhabditis elegans]	1e-028
1945	4587207	(AB020527) Na/PO4 cotransporter homolog	4e-034
1948	728832	!!!! ALU SUBFAMILY SB WARNING ENTRY	0.21
1949	929913	(V01442) ribosomal protein S8 [Xenopus laevis]	0.066
1950	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	2e-006
1951	1125754	(U42833) coded for by C. elegans cDNA cm16f6; coded for by C. elegans cDNA CEESU63F; similar to S. cerevisiae SOF1 protein (SP:P33750) [Caenorhabditis elegans]	1e-028
1952	4587207	(AB020527) Na/PO4 cotransporter homolog	6e-047
1953	4587207	(AB020527) Na/PO4 cotransporter homolog	2e-051
1955	2981631	(AB012223) ORF2 [Canis familiaris]	0.027
1956	4138064	(Y18301) reverse transcriptase [Ovine pulmonary adenocarcinoma virus]	0.0002
1961	4507991	zinc finger protein 140 (clone pHZ-39) >gi|1731416|sp|P52738|Z140_HUMAN ZINC FINGER PROTEIN 140 >gi|2136409|pir||C57785 zinc finger protein ZNF140 - human >gi|487787 (U09368) zinc finger protein ZNF140 [Homo sapiens] >gi|1582217|prf||2118244C ZNF140 prote	8.6

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1962	1711541	SERINE/THREONINE PROTEIN KINASE SSK2 (SUPPRESSOR OF SENSOR KINASE 2) SSK2 gene product [Saccharomyces cerevisiae]	5.9
1963	3236252	(AC004684) CER1-like protein [Arabidopsis thaliana]	3
1964	728836	!!!! ALU SUBFAMILY SP WARNING ENTRY	0.001
1965	4138070	(Y18303) reverse transcriptase [Ovine pulmonary adenocarcinoma virus]	0.0002
1966	114128	ADP-RIBOSYLATION FACTOR 6 1-175) [Gallus gallus]	9e-011
1967	2293566	(AF012896) ADP-ribosylation factor 1 [Oryza sativa]	2e-012
1969	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	0.091
1970	59977	(Z14310) tripartite fusion transcript PLA2L	2e-005
1971	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	9
1972	4155181	(AE001495) putative TYPE II RESTRICTION ENZYME	4.8
1973	2239204	(Z97209) vacuolar carboxypeptidase	0.008
1974	3342107	(AF075269) nef protein [Simian immunodeficiency virus]	6.9
1978	423149	X-linked retinopathy protein (C-terminal, clone XEH.8c) - human (fragment) >gi|299471|bbs|129340 XEH.8c} [human, Peptide Partial, 100 aa] [Homo sapiens]	0.66
1979	1791243	(U83119) ORF2 consensus sequence encoding endonuclease and reverse transcriptase minus RNaseH [Rattus norvegicus]	0.025
1980	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	0.011
1981	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	0.0009
1982	1791243	(U83119) ORF2 consensus sequence encoding endonuclease and reverse transcriptase minus RNaseH [Rattus norvegicus]	4e-006
1984	1903379	(U52073) differentially repressed by testosterone and dihydrotestosterone [Mus musculus]	3.2
1985	1903379	(U52073) differentially repressed by testosterone and dihydrotestosterone [Mus musculus]	3.1
1986	3599339	(AF081111) ORF2 [Mus musculus domesticus]	2e-007
1990	728835	!!!! ALU SUBFAMILY SC WARNING ENTRY	5.9
1991	729093	CCAAT DISPLACEMENT PROTEIN (HOMEOBOX PROTEIN CLOX) (CLOX-1) >gi|423173|pir||S33121 homeotic protein Clox - dog (fragment) >gi|2202|emb|CAA48782|	0.018
1992	126295	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG	0.004

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
1993	1125754	(U42833) coded for by C. elegans cDNA cm16f6; coded for by C. elegans cDNA CEESU63F; similar to S. cerevisiae SOF1 protein (SP:P33750) [Caenorhabditis elegans]	1e-030
1994	3789771	(AF055386) MHC class I related protein precursor	1.9
1995	728832	!!!! ALU SUBFAMILY SB WARNING ENTRY	3.1
1996	3023729	FRUCTOSE-1,6-BISPHOSPHATASE fructose-1,6-bisphosphatase [Mus musculus]	0.21
1997	3182916	ADP-RIBOSYLATION FACTOR factor [Plasmodium falciparum] >gi|1932731 (U57370) ADP-ribosylation factor [Plasmodium falciparum]	2e-015
2000	113668	!!!! ALU CLASS C WARNING ENTRY !!!!	1
2001	728836	!!!! ALU SUBFAMILY SP WARNING ENTRY	0.0003
2002	59977	(Z14310) tripartite fusion transcript PLA2L	7e-007
2003	91035	laminin receptor homolog - mouse 295) [Mus musculus] >gi|228997|prf|1815216A laminin receptor [Cricetinae gen. sp.]	0.12
2005	4506545	regulator of mitotic spindle assembly 1 >gi|1350799|sp|P49646|RMS1_HUMAN REGULATOR OF MITOTIC SPINDLE ASSEMBLY 1 (RMSA-1) sapiens]	3.7
2006	1619936	(U70935) reverse transcriptase [Peromyscus maniculatus]	0.015
2007	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	0.007
2008	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	0.0002
2009	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	5e-006
2010	3157938	(AC002131) Similar to seryl-tRNA synthetase gb|U10400 from S cerevisiae. EST gb|N96627 comes from this gene.	5e-029
2011	2496862	HYPOTHETICAL 6.1 KD PROTEIN C03B1.10 IN CHROMOSOME X >gi|1072242 (U40952) C03B1.10 gene product [Caenorhabditis elegans]	0.17
2012	2443342	(D88764) alpha 2 type I collagen [Rana catesbeiana]	1.2
2013	1546035	(U64570) myelin/oligodendrocyte glycoprotein-16.3kD(a) precursor [Homo sapiens] >gi|1546037 (U64571) myelin/oligodendrocyte glycoprotein-16.3kD(b) precursor	0.15
2014	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	0.006
2015	113668	!!!! ALU CLASS C WARNING ENTRY !!!!	0.003
2016	728838	!!!! ALU SUBFAMILY SX WARNING ENTRY	0.0003
2017	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	1e-005
2019	3002527	(AF010144) neuronal thread protein AD7c-NTP [Homo sapiens]	1e-005
2021	728838	!!!! ALU SUBFAMILY SX WARNING ENTRY	3e-005
2022	2879805	(AL021813) hypothetical protein	0.6

Table 2B Nearest Neighbor (BlastX vs Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2023	1711659	TCP1-CHAPERONIN COFACTOR A taurus]	0.003
2024	113667	!!!! ALU CLASS B WARNING ENTRY !!!!	0.0007
2025	113667	!!!! ALU CLASS B WARNING ENTRY !!!!	0.0007
2026	87765	hypothetical L1 protein (third intron of gene TS) - human >gi|364964|prf|1510254A L1 repetitive element ORF [Homo sapiens]	0.0003
2027	4009460	(AF039401) calcium-dependent chloride channel-1 [Homo sapiens]	2e-011
2028	1730840	PUTATIVE CYSTEINYL-TRNA SYNTHETASE C29E6.06C (CYSTEINE--TRNA LIGASE) (CYSRS) YNL247w - yeast (Saccharomyces cerevisiae)	2e-035
2030	4200165	(Y16262) neutral invertase [Daucus carota]	5.7
2031	1150834	(U42471) Wiscott-Aldrich Syndrome protein homolog [Mus musculus]	0.032
2032	113669	!!!! ALU CLASS D WARNING ENTRY !!!!	0.002
2033	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	0.0008
2034	1657758	(U66707) densin-180 [Rattus norvegicus]	1e-024
2035	4165313	(AB022083) SOX30 protein [Homo sapiens]	0.42
2036	1657758	(U66707) densin-180 [Rattus norvegicus]	1e-024
2037	3193336	(AF069301) DBI-related protein [Homo sapiens]	7e-055
2038	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	8e-008
2039	2981631	(AB012223) ORF2 [Canis familiaris]	6e-008
2040	4098124	(U73522) AMSH [Homo sapiens]	3e-018
2042	113668	!!!! ALU CLASS C WARNING ENTRY !!!!	9e-006
2043	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	5e-009
2044	3123312	ZINC FINGER PROTEIN 142 (KIAA0236) Human zinc finger protein(ZNF142) [Homo sapiens]	0.7
2045	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	0.13
2046	1710216	(U79260) unknown [Homo sapiens]	0.005
2047	558401	(Z38113) incomplete orf, len: 160, CAI: 0.09 similar to MRP_ECOLI P21590 39.9 KD PROTEIN	1e-035
2048	224398	ORF [Simian virus 40]	1.6
2049	728838	!!!! ALU SUBFAMILY SX WARNING ENTRY	0.001
2050	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	3e-005
2051	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	3e-005
2052	2981631	(AB012223) ORF2 [Canis familiaris]	6e-007
2053	2981631	(AB012223) ORF2 [Canis familiaris]	3e-007
2054	2052393	(U86758) netrin-2 like protein [Homo sapiens] sapiens]	5e-012
2055	3023928	PROBABLE HISTONE DEACETYLASE 1-2	6e-031
2056	2500285	60S RIBOSOMAL PROTEIN L5	0.015
2057	728836	!!!! ALU SUBFAMILY SP WARNING ENTRY	0.0003
2058	113668	!!!! ALU CLASS C WARNING ENTRY !!!!	0.001

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2059	1546035	(U64570) myelin/oligodendrocyte glycoprotein-16.3kD(a) precursor [Homo sapiens] >gi|1546037 (U64571) myelin/oligodendrocyte glycoprotein-16.3kD(b) precursor	0.0006
2060	543944	CBID PROTEIN >gi|154423 (L12006) putative [Salmonella typhimurium]	5.9
2064	728836	!!!! ALU SUBFAMILY SP WARNING ENTRY	0.002
2065	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	6e-006
2068	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	0.013
2069	2072977	(U93574) putative p150 [Homo sapiens]	0.001
2070	2072972	(U93572) putative p150 [Homo sapiens]	8e-005
2071	130402	RETROVIRUS-RELATED POL POLYPROTEIN	4e-013
2072	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	0.002
2073	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	0.007
2074	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	4e-006
2075	987050	(X65335) lacZ [Cloning vector pSV-beta-Galactosidase Control]	0.017
2076	106322	hypothetical protein (L1H 3' region) - human	7e-006
2078	804808	(M13100) unknown protein [Rattus norvegicus]	0.11
2079	347964	(L22453) TARBP-b gene product [Homo sapiens]	0.001
2080	1196432	(M22333) unknown protein [Homo sapiens]	4e-005
2081	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	8e-006
2082	3023928	PROBABLE HISTONE DEACETYLASE 1-2	5e-037
2083	4505895	pleiotropic regulator 1 (PRL1, Arabidopsis homolog) >gi|2832296 (AF044333) pleiotropic regulator 1 [Homo sapiens]	6e-071
2086	728836	!!!! ALU SUBFAMILY SP WARNING ENTRY	2e-005
2087	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	6e-008
2088	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	7e-006
2089	106322	hypothetical protein (L1H 3' region) - human	2e-006
2090	2981631	(AB012223) ORF2 [Canis familiaris]	1e-014
2091	3336903	(Y10809) bZIP DNA-binding protein	2.1
2092	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	0.01
2093	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	0.002
2094	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	4e-008
2095	113671	!!!! ALU CLASS F WARNING ENTRY !!!!	0.0001
2096	386786	(J04988) 90 kD heat shock protein [Homo sapiens]	3e-009
2097	106322	hypothetical protein (L1H 3' region) - human	7e-005
2099	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	0.1
2100	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	1e-005

Table 2B Nearest Neighbor (BlastX vs Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2101	2981631	(AB012223) ORF2 [Canis familiaris]	1e-006
2102	2500367	60S RIBOSOMAL PROTEIN L21 *musculus*]	4e-007
2103	4106562	(Z83819) dJ146H21.2 (similar to CYTOCHROME B-245 HEAVY CHAIN) [Homo sapiens]	2e-061
2104	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	8e-006
2106	1869835	(Z86099) protein kinase [human herpesvirus 2]	8.9
2107	1754989	(U47661) proline-rich protein PRP2 precursor [Lupinus luteus]	6.7
2108	2580578	(AF000996) ubiquitous TPR motif, Y isoform [Homo sapiens]	0.0004
2109	1173220	40S RIBOSOMAL PROTEIN S15A	0.0003
2110	3646139	(AJ011081) mader-drop8 [Homo sapiens]	2e-006
2111	3192897	(AF066071) SP85; PsB [Dictyostelium discoideum]	1e-008
2112	126295	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG	8e-009
2113	3599336	(AF081110) ORF2 [Mus musculus domesticus]	5e-012
2115	4185943	(Y17833) pol protein [Human endogenous retrovirus K]	2e-022
2118	53912	(X57960) ribosomal protein L7 [Mus musculus]	3e-027
2120	2506605	HYPOTHETICAL 65.0 KD PROTEIN IN HUPB-COF INTERGENIC REGION >gi|1580716|dbj|BAA11649| hypothetical protein [Escherichia coli] >gi|1786650	4.5
2121	2642222	(AF030885) telomere-associated recQ-like helicase	0.001
2125	1085573	microtubule-associated protein MAP2 - rat molecular weight *microtubule-associated protein cell line, Peptide Partial, 381 aa*] [Rattus sp.]	1.9
2126	3192899	(AF066072) SP85; PsB [Dictyostelium discoideum]	0.024
2127	106322	hypothetical protein (L1H 3' region) - human	1e-005
2128	2981631	(AB012223) ORF2 [Canis familiaris]	2e-010
2129	403460	(L24521) transformation-related protein [Homo sapiens]	0.003
2130	1082633	Nascent polypeptide associated complex alpha chain - human >gi|556642|emb|CAA56869| (X80909) Nascent polypeptide associated complex alpha subunit [Homo sapiens] >gi|4092060 (AF054187) alpha NAC [Homo sapiens]	3e-006
2132	1669472	(U53757) pol polyprotein [Feline immunodeficiency virus]	6.2
2133	1127036	(D26178) serine/threonine protein kinase	0.81
2134	728835	!!!! ALU SUBFAMILY SC WARNING ENTRY	2e-007
2136	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	5e-008
2137	730246	OX-2 MEMBRANE GLYCOPROTEIN PRECURSOR precursor - human (fragment) >gi|1335216|emb|CAA28943|	3e-008
2138	3341992	(AF054174) histone macroH2A1.2 [Homo sapiens]	6e-033
2139	1363325	RNA helicase HEL117 - rat >gi|897915	9.9
2140	3892705	(AL033545) putative protein [Arabidopsis thaliana]	0.14

Table 2B Nearest Neighbor (BlastX vs Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2141	2565196	(AF000381) non-functional folate binding protein [Homo sapiens]	0.007
2142	106322	hypothetical protein (L1H 3' region) - human	5e-007
2143	106322	hypothetical protein (L1H 3' region) - human	0.033
2144	133902	40S RIBOSOMAL PROTEIN S27 ribosomal protein S27 isoform [Homo sapiens]	0.0004
2145	111814	hypothetical protein 3 - rat norvegicus]	2e-011
2146	1669454	(U53748) pol polyprotein [Feline immunodeficiency virus]	8.6
2147	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	6e-005
2148	4506701	ribosomal protein S23 S23 >gi|543449|pir||S41955 ribosomal protein S23 - rat protein [Homo sapiens] >gi|453281|emb|CAA54584| (X77398) ribosomal protein S23 [Rattus norvegicus]	3e-009
2149	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	3e-011
2152	1353390	(U34998) Rad9 [Coprinus cinereus]	8
2153	2134082	hepatocyte growth factor receptor - African clawed frog	4.8
2154	1196432	(M22333) unknown protein [Homo sapiens]	3e-006
2155	730451	60S RIBOSOMAL PROTEIN L13A (23 KD HIGHLY BASIC PROTEIN) >gi|345897|pir||S29539 basic protein, 23K - human >gi|23691|emb|CAA40254| (X56932) 23 kD highly basic protein [Homo sapiens]	2e-008
2156	2072964	(U93569) putative p150 [Homo sapiens]	3e-009
2157	1791243	(U83119) ORF2 consensus sequence encoding endonuclease and reverse transcriptase minus RNaseH [Rattus norvegicus]	4e-012
2158	4506437	retinoblastoma-binding protein 1; RBP1 >gi|1710030|sp|P29374|RBB1_HUMAN RETINOBLASTOMA BINDING PROTEIN 1 (RBBP-1) >gi|2136103|pir||I58383 retinoblastoma binding protein 1 - human protein 1, RBP1 [human, Nalm-6 pre-B cell leukemia, Peptide, 1257 aa] [Homo	5e-008
2160	2981631	(AB012223) ORF2 [Canis familiaris]	0.0008
2161	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	0.0005
2162	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	2e-007
2163	114977	MEMBRANE-ASSOCIATED PROTEIN HEM-2 H19 protein - mouse (fragment) >gi|51136|emb|CAA43693|	2e-012
2165	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	6e-005
2166	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	1e-012

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2172	106323	hypothetical protein (L1H 5' region) - human	9e-010
2173	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	2e-013
2174	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	2e-013
2175	695802	(L39061) transcription factor SL1 [Homo sapiens]	4e-014
2177	2072964	(U93569) putative p150 [Homo sapiens]	5e-007
2180	1085573	microtubule-associated protein MAP2 - rat molecular weight microtubule-associated protein cell line, Peptide Partial, 381 aa] [Rattus sp.]	3.8
2181	104623	collagen, corneal - chicken (fragment)	0.097
2182	2981631	(AB012223) ORF2 [Canis familiaris]	1e-010
2183	2493820	CYTOCHROME C OXIDASE POLYPEPTIDE I ornatipinnis]	3e-011
2184	2494737	HYPOTHETICAL 71.7 KD PROTEIN F52H3.2 IN CHROMOSOME II >gi|3877390|emb|CAA91322|	3e-046
2185	1709997	DNA REPAIR PROTEIN RAD18 pombe]	0.64
2186	59977	(Z14310) tripartite fusion transcript PLA2L	1e-006
2187	2072967	(U93570) putative p150 [Homo sapiens]	5e-007
2188	1800307	(U83883) p105 coactivator [Rattus norvegicus]	4e-010
2189	728831	!!!! ALU SUBFAMILY J WARNING ENTRY	4e-009
2190	2245560	(AF004339) cytochrome c oxidase subunit II [Homo sapiens]	9e-007
2191	3875269	(Z77655) Weak similarity to Human calcium-dependent proetase (SW:CANS_HUMAN)	0.2
2192	728835	!!!! ALU SUBFAMILY SC WARNING ENTRY	2e-010
2193	106322	hypothetical protein (L1H 3' region) - human	3e-013
2194	2072967	(U93570) putative p150 [Homo sapiens]	1e-015
2196	189086	(M18728) ORF1 [Homo sapiens]	0.0005
2197	2605776	(AF027404) signal recognition particle 14a [Macaca radiata]	0.0003
2202	339777	(M80344) ORF2 contains a reverse transcriptase domain.	5e-017
2203	4539386	(AL035526) extensin-like protein	1
2204	3043654	(AB011137) KIAA0565 protein [Homo sapiens]	3e-020
2206	3929396	HYPOTHETICAL 47.8 KD PROTEIN F57B9.5 IN CHROMOSOME III >gi|532824 (U13876) F57B9.5 gene product [Caenorhabditis elegans]	0.1
2207	1769472	(U15780) p82 [Homo sapiens]	9e-037
2208	728837	!!!! ALU SUBFAMILY SQ WARNING ENTRY	8e-015
2209	2506089	26S PROTEASE REGULATORY SUBUNIT 7	1e-016

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2210	1073466	aldehyde dehydrogenase (EC 1.2.1.-) aldB - Escherichia coli >gi|912476 (U00039) No definition line found [Escherichia coli] >gi|1790014 (AE000436) aldehyde dehydrogenase B (lactaldehyde dehydrogenase)	1.4
2211	2072960	(U93568) p40 [Homo sapiens]	3e-005
2212	4009460	(AF039401) calcium-dependent chloride channel-1 [Homo sapiens]	2e-020
2214	100687	hydroxyproline-rich glycoprotein - rice glycoprotein [Oryza sativa]	8.7
2215	3043616	(AB011118) KIAA0546 protein [Homo sapiens]	2e-010
2216	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	6e-014
2218	91043	LINE-1 hypothetical protein - mouse (fragment) musculus]	3e-005
2220	4106562	(Z83819) dJ146H21.2 (similar to CYTOCHROME B-245 HEAVY CHAIN) [Homo sapiens]	5e-061
2221	631507	zinc-containing protein - human	0.0001
2223	2072972	(U93572) putative p150 [Homo sapiens]	3e-009
2224	3123174	HYPOTHETICAL PROTEIN	1e-012
2226	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	1e-007
2227	2981631	(AB012223) ORF2 [Canis familiaris]	3e-013
2228	109930	GTP-binding protein rah - mouse (fragment) G-protein=low-molecular-weight GTP-binding protein GTP-binding protein [Mus musculus]	4e-020
2229	2981631	(AB012223) ORF2 [Canis familiaris]	5e-007
2230	1698455	(U49974) mariner transposase [Homo sapiens]	5e-007
2231	2289235	(U95016) myocyte nuclear factor-beta [Mus musculus]	8e-015
2232	2827495	(AL009196) 1-evidence=predicted by content; 1-method=genefinder;084; 1-evidence_end; 2-evidence=predicted by match; 2-match_accession=AA391048; 2-match_description=LD09991.5prime LD Drosophila melanogaster embryo BlueScript Dro...	1.9
2233	2465330	(U92818) unnamed HERV-H protein [Homo sapiens]	1e-011
2234	2135837	nuclear protein H731 - human >gi|1825562	4e-014
2235	4164448	(AF044958) NADH:ubiquinone oxidoreductase ASHI subunit	2e-025

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2236	4506077	protein kinase C substrate 80K-H >gi|120629|sp|P14314|G19P_HUMAN PROTEIN KINASE C SUBSTRATE, 80 KD PROTEIN, HEAVY CHAIN (PKCSH) (80K-H PROTEIN) >gi|105167|pir||A32469 80K protein H precursor 80K-H=tyrosine-phosphorylated protein/FGF signaling protein [hum	4e-031
2237	2981631	(AB012223) ORF2 [Canis familiaris]	0.007
2238	1176422	(U43194) rhophilin [Mus musculus]	0.81
2239	4263743	(AC004923) similar to UNC-93; similar to U89424 (PID:g3642687) [Homo sapiens]	3e-041
2240	106322	hypothetical protein (L1H 3' region) - human	2e-018
2241	2352427	(AF004161) peroxisomal Ca-dependent solute carrier	1e-044
2242	4104400	(AF035401) exocellobiohydrolase precursor [Piromyces rhizinflata]	4.2
2243	158154	(M81959) POU domain protein [Drosophila melanogaster]	3
2244	114858	MAGNESIUM-PROTOPORPHYRIN IX MONOMETHYL ESTER OXIDATIVE CYCLASE 66 KD SUBUNIT Rhodobacter capsulatus >gi|46113|emb|CAA77530| (Z11165) 575 aa (66 kD) oxidative cyclase subunit [Rhodobacter capsulatus]	2.2
2245	2352427	(AF004161) peroxisomal Ca-dependent solute carrier	3e-044
2246	116746	PROBABLE COAT PROTEIN virus >gi|58812|emb|CAA29526| (X06166) ORF IV (AA 1-489)	4.3
2247	2072967	(U93570) putative p150 [Homo sapiens]	6e-008
2248	2137494	M-sema F protein precusor - mouse homolog=M-Sema F [mice, neonatal brain, Peptide, 834 aa]	5.5
2249	1709971	60S RIBOSOMAL PROTEIN L10A (CSA-19)	1e-015
2250	1498225	(Y07569) PHAPI2a protein [Homo sapiens]	4e-012
2251	1711550	TRANSLOCON-ASSOCIATED PROTEIN, DELTA SUBUNIT PRECURSOR (TRAP-DELTA) (SIGNAL SEQUENCE RECEPTOR DELTA SUBUNIT) (SSR-DELTA) unnamed protein product [Homo sapiens] >gi|1302656 sapiens] >gi|1673433|emb|CAA92215| (Z68129) translocon-associated protein delta sub	3e-012
2252	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	1e-013
2253	4502643	chaperonin containing T-complex subunit 6 >gi|730922|sp|P40227|TCPZ_HUMAN T-COMPLEX PROTEIN 1, ZETA SUBUNIT (TCP-1-ZETA) (CCT-ZETA) (TCP20) sapiens]	1e-014

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2254	2737894	(U59151) Cbf5p homolog [Homo sapiens]	4e-070
2255	1076557	extensin-like protein - cowpea (fragment)	0.6
2257	3878245	(Z69664) Similarity to Yeast cell divison control protein cdc25 (SW:CC@%_SACKL); cDNA EST EMBL:D32475 comes from this gene; cDNA EST EMBL:D34376 comes from this gene; cDNA EST EMBL:D35124 comes from this gene; cDNA EST EMBL:D37... >gi|3879881|emb|CAA93100	9.2
2258	4505067	MAD2 (mitotic arrest deficient, yeast, homolog)-like 1 >gi|950199 (U31278) mitotic feedback control protein Madp2 homolog [Homo sapiens]	2e-009
2259	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	4e-018
2260	4507669	tumor protein, translationally-controlled 1 CONTROLLED TUMOR PROTEIN (TCTP) (P23) factor - human >gi|37496|emb|CAA34200| (X16064) tumor protein (AA 1 - 172) [Homo sapiens]	0.043
2261	66499	arylamine N-acetyltransferase (EC 2.3.1.5), monomorphic - rabbit >gi|217728|dbj|BAA00989| (D10108) arylamine N-acetyltransferase [Oryctolagus cuniculus]	1.8
2262	733532	(U23420) unknown [Drosophila melanogaster]	0.51
2263	3041664	DEOXYURIDINE 5'-TRIPHOSPHATE NUCLEOTIDOHYDROLASE PRECURSOR (DUTPASE) (DUTP PYROPHOSPHATASE) >gi|2443580 (AF018432) dUTPase [Homo sapiens] >gi|2735292 (U90223) deoxyuridine triphosphate nucleotidohydrolase precursor [Homo sapiens]	2e-029
2264	2136246	tastin - human >gi|905356 (U04810) tastin	1.1
2266	126295	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG	0.0002
2267	825671	(X16934) B23 nucleophosmin (280 AA) [Homo sapiens]	4e-013
2268	2231019	(Z97207) B-IND1 protein [Mus musculus]	2e-023
2269	4502189	aquaporin 8 sapiens]	1e-014
2270	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	5e-015
2271	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	5e-015
2272	218564	(D90358) HB-SOD [Schizosaccharomyces pombe]	4e-024
2274	1352736	PELOTA PROTEIN >gi|973224 (U27197) pelota [Drosophila melanogaster]	3e-038
2275	102177	hypothetical protein (ribosomal RNA repeat region) - Giardia lamblia	1.3
2276	113668	!!!! ALU CLASS C WARNING ENTRY !!!!	0.13

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2277	961444	(D63876) KIAA0154 gene product is related to mouse gamma adaptin. [Homo sapiens]	7e-026
2278	3183217	HYPOTHETICAL PROTEIN KIAA0103 sapiens]	5e-017
2282	2072972	(U93572) putative p150 [Homo sapiens]	4e-017
2283	961444	(D63876) KIAA0154 gene product is related to mouse gamma adaptin. [Homo sapiens]	6e-028
2285	4586287	(AB004794) DUF140 [Xenopus laevis]	0.005
2286	3879684	(Z74042) predicted using Genefinder; Similarity to Haemophilus 3-oxoacyl-(acyl-carrier protein) reductase (SW:FABG_HAEIN); cDNA EST yk470b2.3 comes from this gene; cDNA EST yk470b2.5 comes from this gene [Caenorhabditis elegans]	0.0002
2287	131786	RAS-RELATED PROTEIN RAB-1A protein ypt1 - mouse >gi|2144599|pir||TVHUYP GTP-binding protein Rab1 - human >gi|2144600|pir||TVDGYP GTP-binding protein Rab1 - dog >gi|55457|emb|CAA68284| (Y00094) Ypt1 protein (AA 1-205) [Mus musculus] >gi|550060 (M28209) GTP	1e-017
2288	4115532	(AB012043) NBR13 [Homo sapiens]	0.69
2289	4586287	(AB004794) DUF140 [Xenopus laevis]	1e-007
2290	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	9e-020
2293	2981950	Pathogenesis-Related Protein 5d From Nicotiana Tabacum	7.8
2294	482300	cell surface antigen CD34 precursor - human	1e-019
2295	104623	collagen, corneal - chicken (fragment)	0.14
2296	4191746	(L30113) alcohol dehydrogenase; ADH [Papio hamadryas]	2e-018
2297	1518609	(U57715) FGF receptor activating protein FRAG1 [Rattus norvegicus]	1e-020
2298	4502953	collagen, type IV, alpha 4 CHAIN PRECURSOR >gi|1360674|pir||CGHU1B collagen alpha 4(IV) chain precursor - human >gi|574806|emb|CAA56943| IV [Homo sapiens]	0.025
2299	2565196	(AF000381) non-functional folate binding protein [Homo sapiens]	1e-006
2300	2492620	NEURONAL ACETYLCHOLINE RECEPTOR PROTEIN, ALPHA-6 CHAIN PRECURSOR >gi|1458118 (U62435) nicotinic acetylcholine receptor alpha6 subunit precursor [Homo sapiens] >gi|2815225|emb|CAA76155| precursor [Homo sapiens]	1e-009
2301	95095	hypothetical protein 2 - Agrobacterium tumefaciens >gi|39102|emb|CAA37890.1| (X53945) ORF2	3.3

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2302	1765938	(U47077) DNA-dependent protein kinase catalytic subunit	6e-021
2303	2493783	COLLAGEN ALPHA 4(IV) CHAIN bovine (fragment)	3
2304	2645205	(U63648) p160 myb-binding protein [Mus musculus]	3e-029
2305	2645205	(U63648) p160 myb-binding protein [Mus musculus]	9e-030
2306	2495322	HOMEOBOX PROTEIN HOX-A9	8e-014
2307	116509	CALCYCLIN (PROLACTIN RECEPTOR ASSOCIATED PROTEIN) (PRA) (GROWTH FACTOR-INDUCIBLE PROTEIN 2A9) (S100 CALCIUM-BINDING PROTEIN A6) put. calcyclin; putative [Homo sapiens] >gi|183098	4e-006
2308	4502991	cytochrome c oxidase subunit VIIb >gi|461804|sp|P24311|COXM_HUMAN CYTOCHROME C OXIDASE POLYPEPTIDE VIIB PRECURSOR 1.9.3.1) chain VIIb - human >gi|30151|emb|CAA78613| sapiens] >gi|444795|prf||1908229A cytochrome c oxidase:SUBUNIT=VIIb [Homo sapiens]	0.002
2309	4507669	tumor protein, translationally-controlled 1 CONTROLLED TUMOR PROTEIN (TCTP) (P23) factor - human >gi|37496|emb|CAA34200| (X16064) tumor protein (AA 1 - 172) [Homo sapiens]	6e-020
2311	4507207	sorcin sorcin [Homo sapiens] >gi|1094394|prf||2106141A sorcin	2e-018
2312	117061	CYTOCHROME C OXIDASE POLYPEPTIDE III chain III - human mitochondrion (SGC1) oxidase III [Homo sapiens]	3e-017
2313	1709972	60S RIBOSOMAL PROTEIN L10A (CSA-19)	5e-013
2314	4454698	(AF070661) HSPC005 [Homo sapiens]	3e-014
2315	1885381	(U77665) RNaseP protein P30 [Homo sapiens]	1e-020
2316	209383	(M27786) MS-2 pol-stefin B fusion protein [Artificial gene]	7e-008
2318	631507	zinc-containing protein - human	0.03
2319	4502991	cytochrome c oxidase subunit VIIb >gi|461804|sp|P24311|COXM_HUMAN CYTOCHROME C OXIDASE POLYPEPTIDE VIIB PRECURSOR 1.9.3.1) chain VIIb - human >gi|30151|emb|CAA78613| sapiens] >gi|444795|prf||1908229A cytochrome c oxidase:SUBUNIT=VIIb [Homo sapiens]	5e-013
2320	87765	hypothetical L1 protein (third intron of gene TS) - human >gi|364964|prf||1510254A L1 repetitive element ORF [Homo sapiens]	2e-015

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2321	129379	MITOCHONDRIAL MATRIX PROTEIN P1 PRECURSOR (P60 LYMPHOCYTE PROTEIN) (60 KD CHAPERONIN) PROTEIN) (HUCHA60) >gi|107086|pir||A32800 heat shock protein 60 precursor - human >gi|190127 (M22382) mitochondrial matrix protein [Homo sapiens]	8e-016
2322	2231019	(Z97207) B-IND1 protein [Mus musculus]	6e-022
2323	4154176	(U96639) ATPase subunit 6 [Canis familiaris]	0.007
2324	2575807	(D49692) adenylate cyclase [Spirulina platensis]	4.4
2325	4502991	cytochrome c oxidase subunit VIIb >gi|461804|sp|P24311|COXM_HUMAN CYTOCHROME C OXIDASE POLYPEPTIDE VIIB PRECURSOR 1.9.3.1) chain VIIb - human >gi|30151|emb|CAA78613| sapiens] >gi|444795|prf||1908229A cytochrome c oxidase:SUBUNIT=VIIb [Homo sapiens]	5e-007
2326	2119918	P43 - human >gi|833999|bbs|160014 (S75463) P43=mitochondrial elongation factor homolog [human, liver, Peptide, 452 aa] [Homo sapiens]	3e-020
2327	4503145	cathepsin E precursor - human >gi|181194 (J05036) cathepsin E precursor [Homo sapiens] >gi|181205 (M84424) cathepsin E	1e-041 .
2328	4502189	aquaporin 8 sapiens]	2e-023
2329	4502189	aquaporin 8 sapiens]	2e-026
2330	2306969	(AF007860) xl-Mago [Xenopus laevis]	2e-037
2333	3970731	(AJ006480) SBT4B protein [Lycopersicon esculentum]	9
2334	2736524	(AF039052) Similar to inosine monophosphate dehydrogenase; coded for by C. elegans cDNA CEMSF04F; coded for by C. elegans cDNA yk247b12.3; coded for by C. elegans cDNA cm20d8; coded for by C. elegans cDNA yk247b12.5; coded for by C. elegans ..	2.7
2335	1085957	hypothetical protein Y - Streptomyces nogalater >gi|2147591|pir||S69232 hypothetical protein Y	1.1
2336	3183217	HYPOTHETICAL PROTEIN KIAA0103 sapiens]	3e-021
2337	2494312	TRANSLATION INITIATION FACTOR EIF-2B GAMMA SUBUNIT (EIF-2B GDP-GTP EXCHANGE FACTOR) subunit [Rattus norvegicus]	3e-037
2338	337930	(M22146) scar protein [Homo sapiens]	1e-024
2339	68891	transforming protein ets - chicken >gi|211753	2e-007
2340	126296	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG protein [Nycticebus coucang]	9e-017

Table 2B Nearest Neighbor (BlastX vs Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2341	4507517	tight junction protein 1 (zona occludens 1) >gi|585098|sp|Q07157|ZO1_HUMAN TIGHT JUNCTION PROTEIN ZO-1 (TIGHT JUNCTION PROTEIN 1) human >gi|292938 (L14837) tight junction (zonula occludens) protein ZO-1 [Homo sapiens]	9e-023
2343	106851	keratin 18, cytoskeletal - human (fragment) sapiens]	4e-023
2344	1723438	HYPOTHETICAL 52.3 KD PROTEIN C56F8.06C IN CHROMOSOME I PRECURSOR	7.5
2345	2231019	(Z97207) B-IND1 protein [Mus musculus]	7e-022
2346	2047300	(L40459) latent transforming growth factor-beta binding protein [Mus musculus]	0.48
2347	129383	PROBABLE RNA-DEPENDENT HELICASE P68 human >gi|35220|emb|CAA36324| (X52104) p68 protein (AA 1-614) [Homo sapiens] >gi|38318|emb|CAA33751| (X15729) protein p68 (AA 1-614) [Homo sapiens] >gi|2599360	2e-023
2351	4502411	BCL2-interacting killer BCL-2 INTERACTING KILLER (APOPTOSIS INDUCER NBK) (BP4) sapiens] >gi|1235989 (U34584) Bik [Homo sapiens]	3e-025
2352	2072961	(U93568) putative p150 [Homo sapiens]	2e-014
2354	2306969	(AF007860) xl-Mago [Xenopus laevis]	3e-041
2355	1872498	(U74297) PiUS [Oryctolagus cuniculus]	2e-033
2356	1783123	(AB000170) endopeptidase 24.16 type M3 endopeptidase 24.16 type M3 [Sus scrofa] type M3 [Sus scrofa] >gi|1783130|dbj|BAA19065| type M3 [Sus scrofa] >gi|1783134|dbj|BAA19067| type M3 [Sus scrofa]	1e-029
2357	2306969	(AF007860) xl-Mago [Xenopus laevis]	2e-041
2358	1872498	(U74297) PiUS [Oryctolagus cuniculus]	6e-034
2359	4519602	(AB017563) IGSF4 [Homo sapiens]	3e-041
2360	1944330	(D49545) KIFC2 [Mus musculus]	2e-019
2361	4502189	aquaporin 8 sapiens]	6e-040
2362	4502189	aquaporin 8 sapiens]	2e-041
2363	1537070	(U63840) nucleoporin p54 [Rattus norvegicus]	2e-040
2364	3024124	HOMEOBOX PROTEIN MEIS3	8e-030
2365	107215	notch protein homolog TAN-1 precursor - human	5e-040
2366	2306969	(AF007860) xl-Mago [Xenopus laevis]	7e-054
2367	2306969	(AF007860) xl-Mago [Xenopus laevis]	2e-054
2368	4464284	(AC007136) Putative map kinase interacting kinase [Homo sapiens] [Homo sapiens]	7e-045

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2369	4502741	cyclin-dependent kinase 6 KINASE 6 (KINASE PLSTIRE) >gi|107662|pir||S23387 protein kinase (EC 2.7.1.37) cdk6 - human >gi|4389286|pdb|1BI8|A Chain A, Mechanism Of G1 Cyclin Dependent Kinase Inhibition From The Structures Cdk6-P19ink4d Inhibitor Complex >gi	1e-060
2371	2496815	HYPOTHETICAL 68.1 KD PROTEIN B0304.7 IN CHROMOSOME II >gi|1041881 (U39472) similar to f44f4.5 [Caenorhabditis elegans]	0.59
2372	2496815	HYPOTHETICAL 68.1 KD PROTEIN B0304.7 IN CHROMOSOME II >gi|1041881 (U39472) similar to f44f4.5 [Caenorhabditis elegans]	0.56
2373	3327226	(AB014606) KIAA0706 protein [Homo sapiens]	1e-031
2374	3327226	(AB014606) KIAA0706 protein [Homo sapiens]	2e-034
2375	3327226	(AB014606) KIAA0706 protein [Homo sapiens]	2e-038
2376	2231019	(Z97207) B-IND1 protein [Mus musculus]	2e-039
2377	3327226	(AB014606) KIAA0706 protein [Homo sapiens]	4e-043
2378	417743	NEUROLYSIN PRECURSOR (NEUROTENSIN ENDOPEPTIDASE) (MITOCHONDRIAL OLIGOPEPTIDASE M) ANGIOTENSIN-BINDING PROTEIN) (SABP) protein - pig >gi|217709|dbj|BAA01949| (D11336) soluble angiotesin-binding protein [Sus scrofa] type M1 [Sus scrofa] >gi|1871389|dbj|BAA1	1e-047
2379	1783127	(AB000172) endopeptidase 24.16 type M2 endopeptidase 24.16 type M2 [Sus scrofa]	7e-050
2380	2494312	TRANSLATION INITIATION FACTOR EIF-2B GAMMA SUBUNIT (EIF-2B GDP-GTP EXCHANGE FACTOR) subunit [Rattus norvegicus]	7e-056
2381	1085499	CDC4 repeat unit-containing protein - mouse	4e-056
2382	4092846	(AB019987) chromosome-associated polypeptide-C [Homo sapiens]	4e-058
2383	4103446	(AF023265) NAD+-specific isocitrate dehydrogenase beta subunit isoform A [Homo sapiens]	5e-059
2384	1353709	(U42385) FIN16 gene product [Mus musculus]	8e-061
2385	4106818	(AF083395) phospholipase A2-activating protein [Homo sapiens]	5e-061
2386	473407	(U08215) NST-1 [Mus musculus]	2e-061
2387	4103446	(AF023265) NAD+-specific isocitrate dehydrogenase beta subunit isoform A [Homo sapiens]	6e-062
2388	1537070	(U63840) nucleoporin p54 [Rattus norvegicus]	2e-062
2389	3851584	(AF092563) chromosome-associated protein-E [Homo sapiens]	7e-063

Table 2B Nearest Neighbor (BlastX vs. Non-Redundant Proteins)

SEQ ID	ACCESSION	DESCRIPTION1	P VALUE
2390	3851584	(AF092563) chromosome-associated protein-E [Homo sapiens]	6e-063
2391	3493209	(AF052577) aldo-keto reductase [Homo sapiens]	3e-064
2392	4502741	cyclin-dependent kinase 6 KINASE 6 (KINASE PLSTIRE) >gi|107662|pir|S23387 protein kinase (EC 2.7.1.37) cdk6 - human >gi|4389286|pdb|1BI8|A Chain A, Mechanism Of G1 Cyclin Dependent Kinase Inhibition From The Structures Cdk6-P19ink4d Inhibitor Complex >gi	5e-065
2393	3493209	(AF052577) aldo-keto reductase [Homo sapiens]	7e-066
2394	4165018	(D89053) Acyl-CoA synthetase 3 [Homo sapiens]	3e-068
2395	4106818	(AF083395) phospholipase A2-activating protein [Homo sapiens]	1e-068
2396	4165018	(D89053) Acyl-CoA synthetase 3 [Homo sapiens]	1e-070

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1	734646					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis) (Colon Tumor Tissue vs. Colon Metastasis)	14	0	14.22	
		15,16 (Normal Colon vs. Colon Tumor Tissue) (Normal Colon vs. Colon Tumor Tissue)	0	14		13.25
2	400221					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	2	6.87	
3	205329					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	178	7	26.88	
		15,17 (Normal Colon Tissue vs. Colon Metastasis) (Normal Colon Tissue vs. Colon Metastasis)	178	1	191.06	
		18,19 (Normal Colon Tissue vs. Colon Tumor) (Normal Colon Tissue vs. Colon Tumor)	21	0	24	
		18,20 (Normal Colon Tissue vs. Colon Metastasis) (Normal Colon Tissue vs. Colon Metastasis)	21	0	17.95	
4	446680					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	29	84		2.7
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue) (Normal Lung Tissue vs. Lung Tumor Tissue)	40	94		2.33
5	1261					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
6	400258					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
7	450559					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	11		5.42
8	450959					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	9		8.51
9	451794					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	0	15.85	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	1	16.1	
10	415058					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
11	31506					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	20	77		3.64
		08,09 (Lung, High Met vs. Lung, Low Met) (Lung, High Met vs. Lung, Low Met)	5	0	6.99	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	20	58		2.7
12	417155					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
13	448925					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	5	15		2.95
14	11329					
		19,20 (Colon Tumor Tissue vs. Colon Metastasis) (Colon Tumor Tissue vs. Colon Metastasis)	30	5	4.49	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	112	38	3.12	
15	650422					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	18	0	19.32	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	18	6	3.17	
16	6863					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	8		8.67
17	449690					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	17		5.58
18	724616					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
19	549722					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
20	549722					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
21	448110					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	25		11.65
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	25		24.62
22	515631					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
23	11881					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
24	650856					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
25	449701					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	17	1	17.26	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	17		16.08
26	651073					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
27	10340					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
28	648310					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
29	730336					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	24		22.71
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	24	0	24.37	
30	3060					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	17		4.19
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	4	3.7	
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	11		11.27
31	453016					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
33	185461					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	17		17.42
34	452530					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
35	448925					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	5	15		2.95
36	1013					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		01,02 (Colon, High Met vs. Colon, Low Met)	40	84		2.28
37	6545					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
38	449891					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
39	4045					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	11		5.96
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	1	9.76	
40	404475					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	2	5.59	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	19	2	10.2	
41	650297					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
42	650493					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
43	644884					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	0	11.81	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
44	452212					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
45	402727					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	5	17		3.17
46	645194					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
47	447501					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	3	5.37	
48	556326					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
49	447035					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
50	2551					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
51	736154					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
52	452028					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
53	447441					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	34	129		3.53

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	34	129		3.74
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		10.7
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	155	32	4.89	
54	11028					
		01,02 (Colon, High Met vs. Colon, Low Met) (Colon, High Met vs. Colon, Low Met)	0	6		6.5
55	640974					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
56	555103					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	0	6		5.94
57	446789					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	5	3.38	
58	644884					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	0	11.81	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
59	9029					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	0	6.46	
60	419255					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	0	11.63	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	1	11.81	
61	4309					
		01,02 (Colon, High Met vs. Colon, Low Met)	4	13		3.52
62	554069					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
63	4330					
		03,04 (Breast, High Met vs. Breast, Non-Met) (Breast, High Met vs. Breast, Non-Met)	13	3	4.23	
		01,02 (Colon, High Met vs. Colon, Low Met)	1	10		10.84
64	644903					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
65	549395					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	13		6.06
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	13		12.8
66	4974					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	8		8.67
67	447466					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	155	5	32.77	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	16	1	18.28	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	155	2	83.19	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	16	0	13.68	
68	645073					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
69	447978					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
70	607430					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
71	556198					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
72	450323					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
73	21205					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	9		9.22
74	561109					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
75	446673					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
76	456026					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	24	4	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	24	8	3.22	
77	449142					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	1	9.14	
78	5830					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
79	554109					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	2	7.93	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	11		5.42
80	595506					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
81	453981					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	43	258		5.94
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	2	110		73.53
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	590	6	99.86	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	68	6	12.16	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	68	590		8.21
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	0	110		128.7
82	642461					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	0	15.03	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	0	10.16	
83	556198					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
84	2082					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	55		3.76
		08,09 (Lung, High Met vs. Lung, Low Met)	7	38		3.88
85	549435					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	2	7.4	
86	2286					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	5	28		5.3
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	13	2	4.86	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	5	19		3.54

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		18,19 (Normal Colon Tissue vs. Colon Tumor)	3	13		3.79
87	2737					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	14		4.6
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	14		3.26
88	728115					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
89	650856					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
90	650476					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
91	535208					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
92	733849					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
93	447978					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
94	729483					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
95	12018					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
96	4747					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	10		5.42
97	4747					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	10		5.42
98	185577					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	8		8.2
99	4126					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	1	12.68	
100	11456					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
101	729851					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
102	449849					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
103	2490					
		08,09 (Lung, High Met vs. Lung, Low Met)	7	1	9.78	
		01,02 (Colon, High Met vs. Colon, Low Met)	21	6	3.23	
		03,04 (Breast, High Met vs. Breast, Non-Met)	14	3	4.55	
104	549041					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
105	11881					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
106	724296					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	128		121.1
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	128	0	129.99	
107	726173					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
108	2423					
		03,04 (Breast, High Met vs. Breast, Non-Met)	14	0	13.66	
109	556250					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	28		26.49
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	28	4	7.11	
110	643594					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
111	11881					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
112	7436					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
113	2110					
		03,04 (Breast, High Met vs. Breast, Non-Met)	31	5	6.05	
114	10340					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
115	643594					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
116	447035					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
117	402707					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
118	645799					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
119	171511					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
120	451607					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
121	3138					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	10		10.25
122	2988					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	11		5.96
123	447326					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
124	561734					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
125	454999					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	28	15	2	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	28	11	2.69	
126	185652					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
127	6725					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	0	9.76	
128	726644					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	18		17.03
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	18	0	18.28	
129	11012					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
130	726377					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
131	735326					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
132	650845					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
133	9048					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	0	6.46	
134	732254					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	0	8		7.92

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
135	452052					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
136	554079					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	10		4.92
137	9049					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	0	6.46	
138	1307					
		03,04 (Breast, High Met vs. Breast, Non-Met)	14	89		6.52
139	139730					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
140	7750					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	14		14.35
141	8050					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
142	725222					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
143	3275					
		03,04 (Breast, High Met vs. Breast, Non-Met)	8	0	7.81	
144	7424					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
145	8953					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	13		13.32
146	8966					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
147	530883					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
148	6725					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	0	9.76	
149	4439					
		08,09 (Lung, High Met vs. Lung, Low Met)	10	2	6.99	
		01,02 (Colon, High Met vs. Colon, Low Met)	15	2	6.92	
150	648472					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
151	735346					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
152	732121					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
153	650337					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
154	533588					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
155	649667					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
156	394436					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
157	649354					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
158	2022					
		03,04 (Breast, High Met vs. Breast, Non-Met)	5	15		3.07
		21,22 (Normal Prostate vs. Prostate Cancer)	0	6		6.1
159	561359					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	3	4.29	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	2	6.34	
160	7607					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	3	4.65	
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	4	3.44	
161	7750					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	14		14.35
162	410554					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
163	2315					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	118		17.28
		01,02 (Colon, High Met vs. Colon, Low Met)	25	4	5.76	
164	561734					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
165	4420					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
		01,02 (Colon, High Met vs. Colon, Low Met)	1	10		10.84
166	559663					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	4	3.96	
167	7082					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	0	9.76	
168	2315					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	118		17.28
		01,02 (Colon, High Met vs. Colon, Low Met)	25	4	5.76	
169	650472					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
170	6482					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
171	4584					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	11		11.93
172	453846					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	11		10.25
173	650820					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
174	642906					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
175	448805					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	20		3.28
176	649667					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
177	735786					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
178	121457					
		08,09 (Lung, High Met vs. Lung, Low Met)	91	359		2.82
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
179	372960					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	18		2.79
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	33		5.2
180	120049					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
181	648996					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
182	3765					
		01,02 (Colon, High Met vs. Colon, Low Met)	19	6	2.92	
183	462642					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
184	727181					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
185	649259					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
186	649717					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
187	736860					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
188	729175					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
189	642906					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
190	4420					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
		01,02 (Colon, High Met vs. Colon, Low Met)	1	10		10.84
191	2420					
		01,02 (Colon, High Met vs. Colon, Low Met)	28	11	2.35	
192	648109					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
193	2334					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
194	639705					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	0	10.57	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
195	551907					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
196	561382					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	2	6.34	
197	595506					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
198	499424					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
199	735477					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
200	734370					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	11		10.41
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
201	779					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		01,02 (Colon, High Met vs. Colon, Low Met)	27	54		2.17
		03,04 (Breast, High Met vs. Breast, Non-Met)	60	22	2.66	
202	649143					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
203	489					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	58		4.5
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	58		4.57
204	2994					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	14		5.06
205	2994					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	14		5.06
206	11147					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
207	549395					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	13		6.06
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	13		12.8
208	559806					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
209	452238					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
210	225914					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
211	463480					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
212	184725					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
213	557401					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
214	455155					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
215	551117					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
217	729295					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
218	450429					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	1	13.95	
219	450148					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
220	380412					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
221	446614					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
222	555911					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	21		9.78
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	21		20.68
223	450828					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
224	28					
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	2	11		6.43
		18,19 (Normal Colon Tissue vs. Colon Tumor)	2	43		18.81
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	53	207		3.64
		03,04 (Breast, High Met vs. Breast, Non-Met)	697	1789		2.63
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	43	11	2.92	
225	446450					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	3	3.88	
226	452026					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	35	14	2.64	
227	643594					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
228	1905					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	21		3.25
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
229	651073					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
230	553705					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	0	12.68	
231	521840					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
232	648689					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
233	447858					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
234	556198					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
235	394436					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
236	639651					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
237	499424					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
238	468109					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
239	185701					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
240	451811					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
241	730670					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
242	172013					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
243	449142					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	1	9.14	
244	446964					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
245	414739					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	14		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	14		6.52
246	641124					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
247	555702					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	2	5.81	
248	549435					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	2	7.4	
249	643954					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
250	5984					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
251	560526					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
252	411113					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
253	7607					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	4	3.44	
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	3	4.65	
254	559409					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
255	650053					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	1	10.57	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
256	448511					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	26		8.07
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	26		6.4
257	642142					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	11		5.2
258	470462					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
259	431601					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	9	0	7.69	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	28	9	3.34	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	28	6	4.93	
		08,09 (Lung, High Met vs. Lung, Low Met)	5	0	6.99	
260	421431					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
261	284586					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
262	556198					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
263	431601					
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	9	0	7.69	
		08,09 (Lung, High Met vs. Lung, Low Met)	5	0	6.99	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	28	6	4.93	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	28	9	3.34	
264	449891					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
265	556561					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	10		9.32
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	10		9.85
266	554188					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
267	3247					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	20		21.68

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	26		3.66
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	26		6.06
268	546705					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
269	560984					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
270	455820					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
271	643129					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
272	454653					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	17		5.28
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	5	17		3.35
273	456549					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
274	454806					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
275	724296					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	128		121.1
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	128	0	129.99	
276	559280					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
277	171511					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
278	644242					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
279	734370					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	11		10.41
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
280	639459					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	0	11.81	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
281	641679					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
282	644611					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
283	550038					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
284	452567					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	14		4.6

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	21	3	7.4	
285	411113					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
286	650749					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
287	558899					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
288	452986					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
289	393197					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
290	499424					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
291	21669					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
292	640590					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	
293	549936					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
294	448770					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
295	559280					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
296	648934					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
297	452685					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	5	3.17	
298	456549					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
299	446614					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
300	559280					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
301	446673					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
302	562550					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
303	467288					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
304	463824					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
305	393197					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
306	407077					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
307	499424					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
308	554500					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
309	730143					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
310	595506					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
311	2334					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
312	647444					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
313	380291					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
314	644849					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
315	449457					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
316	446673					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
317	549069					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	56		4.82
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	36		3.05
318	728884					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
319	415058					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
320	553955					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
321	455820					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
322	549617					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
323	449831					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	10		9.85
324	451580					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
325	558899					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
326	562292					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
327	5830					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
328	8953					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	13		13.32
329	8012					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
330	185718					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
331	729851					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
332	185597					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	8		8.2
333	9887					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
334	725825					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
335	6545					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
336	21205					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	9		9.22
337	8867					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
338	729295					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
339	730430					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
340	7072					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	1	9.76	
341	730533					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
342	9121					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
343	11131					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
344	640116					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	4	5.02	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	19	0	20.39	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
345	730282					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
346	550571					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
347	1183					
		01,02 (Colon, High Met vs. Colon, Low Met)	4	71		19.24
		03,04 (Breast, High Met vs. Breast, Non-Met)	32	15	2.08	
348	449437					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	3	4.93	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	12		3.94
349	8966					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
350	6134					
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	22	5	3.76	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	142	40	3.81	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	142	42	3.57	
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	22	5	3.29	
351	95700					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	21		21.52
352	7066					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	9		9.76
353	648310					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
354	730059					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
355	736014					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
356	646577					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
357	732254					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	0	8		7.92
358	7037					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	9		9.76
359	7037					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	9		9.76
360	6937					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	0	9.76	
361	7572					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	8		8.67
362	388085					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	0	9.51	
363	2676					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	17		9.22
364	639240					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	0	9.51	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
365	650472					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
366	727789					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
367	2495					
		03,04 (Breast, High Met vs. Breast, Non-Met)	27	5	5.27	
		08,09 (Lung, High Met vs. Lung, Low Met)	13	2	9.08	
368	732254					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	0	8		7.92
369	5268					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	15		16.26
370	11881					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
371	448677					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	1	11.63	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
372	1876					
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	3	4.88	
373	3441					
		01,02 (Colon, High Met vs. Colon, Low Met)	4	13		3.52
		03,04 (Breast, High Met vs. Breast, Non-Met)	8	0	7.81	
374	726134					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
375	9048					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	0	6.46	
376	26489					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	8		8.2
377	644205					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
378	468689					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
379	638971					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
380	10274					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
381	6725					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	0	9.76	
382	2488					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
383	8366					
		21,22 (Normal Prostate vs. Prostate Cancer) (Normal Prostate vs. Prostate Cancer)	2	15		7.63
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	2	7.32	
384	502683					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
385	450914					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
386	21205					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	9		9.22
387	644205					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
388	5268					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	15		16.26
389	8012					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
390	11270					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
391	10924					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
393	3650					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	2	4.88	
394	1655					
		01,02 (Colon, High Met vs. Colon, Low Met)	67	2	30.9	
		21,22 (Normal Prostate vs. Prostate Cancer)	116	51	2.24	
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	58		59.45
395	3275					
		03,04 (Breast, High Met vs. Breast, Non-Met)	8	0	7.81	
396	3355					
		03,04 (Breast, High Met vs. Breast, Non-Met)	21	7	2.93	
397	2078					
		03,04 (Breast, High Met vs. Breast, Non-Met)	11	2	5.37	
398	4809					
		08,09 (Lung, High Met vs. Lung, Low Met)	3	27		6.44
		01,02 (Colon, High Met vs. Colon, Low Met)	15	1	13.84	
399	6402					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	0	9.76	
400	555244					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
401	548965					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	14		3.45
402	4747					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	10		5.42
403	40208					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
404	14596					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		08,09 (Lung, High Met vs. Lung, Low Met)	14	6	3.26	
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	17		17.42
405	7110					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	19		4.87
406	7110					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	19		4.87
407	6592					
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	1	11.71	
408	6455					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
409	2738					
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	4	3.66	
410	696					
		03,04 (Breast, High Met vs. Breast, Non-Met)	37	13	2.78	
		01,02 (Colon, High Met vs. Colon, Low Met)	24	87		3.93
411	379186					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
412	1588					
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	95		6.49
		01,02 (Colon, High Met vs. Colon, Low Met)	45	19	2.18	
413	7007					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	9		9.76
414	9025					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	0	6.46	
415	650749					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
416	553158					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
417	641703					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	0	12.88	
418	833					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
		08,09 (Lung, High Met vs. Lung, Low Met)	18	9	2.79	
		03,04 (Breast, High Met vs. Breast, Non-Met)	16	3	5.2	
419	649259					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
420	451179					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
421	9505					
		03,04 (Breast, High Met vs. Breast, Non-Met)	3	15		5.12
422	736728					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
423	380412					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
424	642425					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
425	405073					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
426	174250					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	13		6.4
427	726281					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
428	639029					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
429	452245					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	12		11.82
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	12		11.18
430	510254					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	17	1	17.97	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
431	642425					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
432	51939					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	28	3	9.87	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	28	0	30.05	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
433	7379					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
434	546632					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	15	0	15.23	
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	3	34		11.22
435	734827					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
436	2554					
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	7	2.79	
437	643285					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
438	448770					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
439	375380					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
440	726134					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
441	422687					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	0	10.16	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	10		9.46

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
442	448436					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	20	2	10.16	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	4	20		4.73
443	644893					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
444	559104					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
445	551172					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
446	724296					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	128		121.1
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	128	0	129.99	
447	735936					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
448	556326					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
449	729699					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
450	550694					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	21	7	3.22	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
461	515350					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	0	14.8	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	3	5.01	
462	402494					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	13		4.1
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	3	4.4	
463	649148					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
464	833					
		03,04 (Breast, High Met vs. Breast, Non-Met)	16	3	5.2	
		08,09 (Lung, High Met vs. Lung, Low Met)	18	9	2.79	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
465	139730					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
466	453079					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
467	546705					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
468	644903					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
469	732254					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	0	8		7.92
470	561180					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	2	5.81	
471	732254					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	0	8		7.92
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
472	449204					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	14		13.04
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	14		4.6
473	185651					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
474	639029					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
475	452986					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
476	729779					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
477	646248					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
478	650448					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
479	642049					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
480	728273					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
481	446139					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	0	13.74	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	12	0	13.71	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	0	13.95	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	12	0	10.26	
482	2783					
.		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		03,04 (Breast, High Met vs. Breast, Non-Met)	5	40		8.2
		01,02 (Colon, High Met vs. Colon, Low Met)	27	6	4.15	
483	642906					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
484	8332					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
485	453470					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	1	12.88	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	1	12.68	
486	552277					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
487	464029					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
489	649722					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
490	612572					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
491	385980					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	27	12	2.28	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	12		5.59
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	27		12.77
492	141185					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
493	463824					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
494	446139					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	0	13.74	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	0	13.95	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	12	0	13.71	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	12	0	10.26	
495	725994					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
496	736679					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
497	551718					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
498	640525					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
499	645210					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	1	10.57	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
500	6567					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	0	9.76	
501	646146					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
502	4934					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		01,02 (Colon, High Met vs. Colon, Low Met)	1	9		9.76
503	450791					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	18	6	3.17	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	18	3	6.44	
504	227936					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
505	9436					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	15		3.69
506	2557					
		01,02 (Colon, High Met vs. Colon, Low Met)	23	8	2.65	
507	11356					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
508	7571					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	8		8.67
509	558116					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
510	216574					
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	15	2	6.41	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	107	29	3.96	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	107	29	3.9	
511	455145					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
512	649148					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
513	648996					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
514	304253					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
515	649717					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
516	5838					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	9		9.76
517	454050					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
518	557903					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
519	1724					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	24		4.1
520	734803					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
521	557948					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
522	5838					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	9		9.76
523	2334					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
524	450953					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	14		6.52
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	14		13.79
525	4840					
		03,04 (Breast, High Met vs. Breast, Non-Met)	18	6	2.93	
526	728421					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
527	4747					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	10		5.42
528	648934					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
529	1787					
		01,02 (Colon, High Met vs. Colon, Low Met)	17	36		2.3
530	558098					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
531	1655					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	58		59.45
		21,22 (Normal Prostate vs. Prostate Cancer)	116	51	2.24	
		01,02 (Colon, High Met vs. Colon, Low Met)	67	2	30.9	
532	158601					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	10		10.25
533	185486					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	13		13.32
534	7110					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	19		4.87
535	2543					
		01,02 (Colon, High Met vs. Colon, Low Met)	23	7	3.03	
536	115762					
		21,22 (Normal Prostate vs. Prostate Cancer)	16	5	3.15	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
537	696					
		01,02 (Colon, High Met vs. Colon, Low Met)	24	87		3.93
		03,04 (Breast, High Met vs. Breast, Non-Met)	37	13	2.78	
538	1948					
		03,04 (Breast, High Met vs. Breast, Non-Met)	37	15	2.41	
539	696					
		01,02 (Colon, High Met vs. Colon, Low Met)	24	87		3.93
		03,04 (Breast, High Met vs. Breast, Non-Met)	37	13	2.78	
540	696					
		03,04 (Breast, High Met vs. Breast, Non-Met)	37	13	2.78	
		01,02 (Colon, High Met vs. Colon, Low Met)	24	87		3.93
541	380477					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
542	638799					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
543	551982					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
544	551982					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
545	521840					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
546	561180					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	2	5.81	
547	556245					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
548	449792					
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	0	5		6.68
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	13		4.1
549	549722					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
550	612572					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
551	551235					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
552	449701					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	17	1	17.26	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	17		16.08
553	375380					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
554	56940					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
555	549160					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
556	554151					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	15		13.97
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	9		8.51
557	727331					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
558	551502					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	22	7	3.32	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	19		2.67
559	612572					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
560	701221					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
561	378041					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	4	3.3	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	13		12.3
562	503491					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
563	452833					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
564	640974					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
565	735326					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
566	555944					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
567	447532					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	0	11.63	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	1	11.81	
568	455598					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
569	555734					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	10		9.32
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	10		9.85
570	446663					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	32		5.25

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	1	8		9.36
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		10.7
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	32		2.13
571	449862					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
572	549591					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	24		3.38
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	24		11.18
573	553877					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
574	553501					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	1	14.8	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	3	5.01	
575	1905					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	21		3.25
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
576	446599					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	2	6.87	
577	559409					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
578	551982					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
579	559057					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
580	446760					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	22	7	3.19	
581	551502					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	19		2.67
		15,16 (Normal Colon vs. Colon Tumor Tissue)	22	7	3.32	
582	446531					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
583	506744					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
584	401849					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	15		14.77
585	453848					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	14		6.62
586	456764					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	1	15.03	
587	446371					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
588	406413					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
589	555103					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	0	6		5.94
590	735292					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
591	558534					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
592	727181					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
593	551117					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
594	464040					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
595	446371					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
596	728408					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	12	0	12.19	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	12		11.35
597	649259					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
598	15414					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
599	639240					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	0	9.51	
600	549722					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
601	561499					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
602	639029					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
603	449512					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	14		3.26
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	14		13.79
604	446987					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
605	466302					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	
606	553802					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
607	639662					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
608	551527					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
609	730389					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
610	640974					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
611	417155					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
612	417155					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
613	451784					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
614	649152					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
615	450867					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
616	143436					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	21	9	2.5	
617	549395					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	13		12.8
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	13		6.06
618	639273					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	0	9.51	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
619	506744					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
620	736595					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
621	230995					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
622	451784					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
623	226324					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
624	449617					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	18		2.53
625	451092					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
626	546642					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
627	553736					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	10		4.92
628	394413					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	113	3	39.81	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	21	0	17.95	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	21	2	12	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	113	0	121.29	
629	556326					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
630	448606					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	20		6.21
631	394413					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	113	0	121.29	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	21	2	12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	113	3	39.81	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	21	0	17.95	
632	645633					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
633	551634					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
634	556326					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
635	540787					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
636	648872					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
637	643804					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
638	446139					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	0	13.95	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	12	0	13.71	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	12	0	10.26	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	0	13.74	
639	640356					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
640	379186					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
641	454927					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	14		4.6
642	401849					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	15		14.77
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
643	452414					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	17	0	17.97	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	17	0	18.25	
644	446789					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	5	3.38	
645	189561					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
		08,09 (Lung, High Met vs. Lung, Low Met)	1	14		10.02
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38
646	640323					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
647	558116					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
648	468109					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
649	481441					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	12	0	12.19	
650	449956					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
651	727224					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
652	551907					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
653	447532					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	0	11.63	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	1	11.81	
654	447532					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	1	11.81	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	0	11.63	
655	558454					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
656	502683					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
657	446909					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	12		5.91
658	452506					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
659	449792					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	0	5		6.68
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	13		4.1
660	549395					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	13		6.06
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	13		12.8
661	234653					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	18		2.95
662	453911					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
663	452071					
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	14	0	11.97	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	109	1	115.21	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	109	0	117	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	14	0	16	
664	451032					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
665	446680					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	29	84		2.7
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	40	94		2.33
666	641884					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
667	452800					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	13		4.04
668	461835					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
669	548965					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	14		3.45
670	734793					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
671	539955					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	3	47		15.51
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	24	0	24.37	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	0	11.81	
672	561892					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
673	562292					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
674	420686					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
675	9436					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	15		3.69
676	1013					
		01,02 (Colon, High Met vs. Colon, Low Met)	40	84		2.28

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
677	412364					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
678	44424					
		08,09 (Lung, High Met vs. Lung, Low Met)	4	40		7.16
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	25	90		3.35
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	41	90		2.16
679	394413					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	113	0	121.29	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	21	2	12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	113	3	39.81	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	21	0	17.95	
680	449617					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	18		2.53
681	455032					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
682	185400					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	62		63.55
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
683	453911					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
684	650297					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
685	185400					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	62		63.55
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
686	449512					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	14		3.26
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	14		13.79
687	44424					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	41	90		2.16
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	25	90		3.35
		08,09 (Lung, High Met vs. Lung, Low Met)	4	40		7.16
688	556216					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
689	448677					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	1	11.63	
690	375380					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
691	379341					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	14		4.35
		08,09 (Lung, High Met vs. Lung, Low Met)	2	21		7.51
692	376988					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
693	559806					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
694	550195					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
695	562221					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
696	211					
		01,02 (Colon, High Met vs. Colon, Low Met)	109	206		2.05
		03,04 (Breast, High Met vs. Breast, Non-Met)	121	43	2.75	
697	6751					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	11		11.27
		08,09 (Lung, High Met vs. Lung, Low Met)	5	0	6.99	
698	6751					
		08,09 (Lung, High Met vs. Lung, Low Met)	5	0	6.99	
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	11		11.27
700	2883					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	21		2.39
701	9784					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
702	649722					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
704	10340					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
705	1649					
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	1	14.63	
706	4325					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
707	10882					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	20		3.42
708	10342					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
709	6474					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
710	10340					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
711	734723					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
712	452142					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	2	5.08	
713	185432					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	26		26.65

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
714	11456					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
715	508892					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	10		4.92
716	67					
		03,04 (Breast, High Met vs. Breast, Non-Met)	23	0	22.44	
		01,02 (Colon, High Met vs. Colon, Low Met)	0	32		34.69
717	2636					
		08,09 (Lung, High Met vs. Lung, Low Met)	7	1	9.78	
		01,02 (Colon, High Met vs. Colon, Low Met)	8	19		2.57
718	735028					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
719	1924					
		01,02 (Colon, High Met vs. Colon, Low Met)	8	21		2.85
720	640116					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	4	5.02	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	19	0	20.39	
721	6546					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	9		9.76
722	730866					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
723	4829					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
724	546632					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	3	34		11.22
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	15	0	15.23	
725	549934					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	3	3.88	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	20		6.56
		21,22 (Normal Prostate vs. Prostate Cancer)	8	0	7.87	
726	649655					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	12	0	12.19	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
727	62016					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
728	2783					
		01,02 (Colon, High Met vs. Colon, Low Met)	27	6	4.15	
		03,04 (Breast, High Met vs. Breast, Non-Met)	5	40		8.2
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
729	3876					
		21,22 (Normal Prostate vs. Prostate Cancer)	9	26		2.94
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	14		4.35
730	20036					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	13		12.11
731	644032					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	124	0	125.92	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	124		16.76

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
732	451636					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
733	3428					
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	0	19.51	
734	643954					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
735	456506					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	17	7	2.61	
736	449269					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	26	7	3.99	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	26	5	5.5	
737	732712					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
738	696					
		01,02 (Colon, High Met vs. Colon, Low Met)	24	87		3.93
		03,04 (Breast, High Met vs. Breast, Non-Met)	37	13	2.78	
739	456528					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
740	4043					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	9		9.76
741	3639					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	3	3.9	
742	1024					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	292		299.3
		08,09 (Lung, High Met vs. Lung, Low Met)	41	11	5.21	
743	1247					
		03,04 (Breast, High Met vs. Breast, Non-Met)	51	15	3.32	
744	4934					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	9		9.76
745	901					
		03,04 (Breast, High Met vs. Breast, Non-Met)	56	5	10.93	
746	452726					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
747	725825					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
748	456808					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	42		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	42	1	42.65	
749	729295					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
750	551907					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
751	551527					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
752	7098					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	0	9.76	
753	4589					
		01,02 (Colon, High Met vs. Colon, Low Met)	14	2	6.46	
754	554812					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
755	3114					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
756	6031					
		01,02 (Colon, High Met vs. Colon, Low Met)	9	1	8.3	
757	185628					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
758	24719					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	26		6.66
		21,22 (Normal Prostate vs. Prostate Cancer)	4	14		3.56
759	3428					
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	0	19.51	
760	2676					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	17		9.22
761	649148					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
762	234605					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	17	5	3.43	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	39	14	2.83	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	32	14	2.45	
763	2224					
		03,04 (Breast, High Met vs. Breast, Non-Met)	44	8	5.37	
764	185642					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
765	649655					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	12	0	12.19	
766	2854					
		03,04 (Breast, High Met vs. Breast, Non-Met)	31	3	10.08	
767	453470					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	1	12.68	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	1	12.88	
768	11012					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
769	535208					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
770	448606					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	20		6.21
771	12304					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	5	17		3.48
772	2756					
		01,02 (Colon, High Met vs. Colon, Low Met)	28	8	3.23	
773	367					
		08,09 (Lung, High Met vs. Lung, Low Met)	30	99		2.36
		03,04 (Breast, High Met vs. Breast, Non-Met)	105	24	4.27	
		01,02 (Colon, High Met vs. Colon, Low Met)	19	97		5.53
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	4	3.44	
774	11351					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
775	6858					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	8		8.67
776	7750					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	14		14.35
777	6923					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
778	11552					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
779	12448					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
781	10342					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
782	9026					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	0	6.46	
783	10342					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
784	6455					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
785	6455					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
786	3416					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	11		11.93
787	3416					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	11		11.93
788	2889					
		01,02 (Colon, High Met vs. Colon, Low Met)	8	19		2.57
789	7393					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	8		8.2
790	14390					
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	43		22.04
791	661					
		03,04 (Breast, High Met vs. Breast, Non-Met)	77	10	7.51	
		08,09 (Lung, High Met vs. Lung, Low Met)	0	10		7.16
792	452992					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
793	1943					
		03,04 (Breast, High Met vs. Breast, Non-Met)	16	4	3.9	
		01,02 (Colon, High Met vs. Colon, Low Met)	9	29		3.49
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	19		3
794	2027					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	35		2.99
795	5482					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	8		8.67
796	650493					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
797	640318					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
798	646309					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
799	4316					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
800	449701					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	17	1	17.26	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	17		16.08
801	560367					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
802	9997					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
803	649106					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
804	461835					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
805	640590					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	
806	648340					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
807	554812					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
808	447035					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
809	1208					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	0	12.68	
810	3114					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
811	3114					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
812	734078					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
813	450323					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
814	11567					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
815	11567					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
816	6660					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	0	6.46	
817	9026					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	0	6.46	
818	185539					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	10		10.25
819	3224					
		01,02 (Colon, High Met vs. Colon, Low Met)	17	2	7.84	
820	95700					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	21		21.52
821	4439					
		08,09 (Lung, High Met vs. Lung, Low Met)	10	2	6.99	
		01,02 (Colon, High Met vs. Colon, Low Met)	15	2	6.92	
822	3428					
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	0	19.51	
823	1456					
		01,02 (Colon, High Met vs. Colon, Low Met)	9	22		2.65
		03,04 (Breast, High Met vs. Breast, Non-Met)	50	9	5.42	
824	11343					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
825	729206					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	10		9.46
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	0	10.16	
826	558371					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
827	451589					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
828	404475					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	2	5.59	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	19	2	10.2	
829	734582					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
830	729779					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
831	555244					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
832	449269					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	26	7	3.99	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	26	5	5.5	
833	4609					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	12		6.5
834	640318					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
835	729851					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
836	11028					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
837	643924					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
838	630259					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
839	11286					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
840	185651					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
841	7379					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
842	728408					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	12		11.35
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	12	0	12.19	
843	646309					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
844	405073					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
845	185489					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	12		12.3
846	447326					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
847	11006					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
848	6863					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	8		8.67
849	11351					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
850	401553					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
851	504513					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
852	645979					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
853	6923					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
854	1924					
		01,02 (Colon, High Met vs. Colon, Low Met)	8	21		2.85
855	5838					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	9		9.76
856	2062					
		13,14 (bFGF Treated HMVEC vs. VEGF-Treated HMVEC) (bFGF Treated HMVEC vs. VEGF-Treated HMVEC)	0	7		6.88
		03,04 (Breast, High Met vs. Breast, Non-Met)	8	19		2.43
		01,02 (Colon, High Met vs. Colon, Low Met)	9	39		4.7

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
857	447388					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	142	4	38.1	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	18	0	20.57	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	18	0	15.39	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	142	2	75.05	
858	12419					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	15		15.37
859	3224					
		01,02 (Colon, High Met vs. Colon, Low Met)	17	2	7.84	
860	5474					
		03,04 (Breast, High Met vs. Breast, Non-Met)	5	17		3.48
		01,02 (Colon, High Met vs. Colon, Low Met)	1	8		8.67
861	3522					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	12		4.34
862	731785					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
863	3765					
		01,02 (Colon, High Met vs. Colon, Low Met)	19	6	2.92	
864	640323					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
865	379105					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
866	448029					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
867	650476					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
868	640525					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
869	390124					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	18		2.79
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	5.98	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	0	8		7
870	464029					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
871	468109					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
872	21669					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
873	651088					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
874	2737					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	14		4.6
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	14		3.26
875	556421					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	1	12.68	
876	452245					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	12		11.82
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	12		11.18
877	447539					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
878	546642					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
879	236368					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	271	16	17.9	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	271	0	290.88	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	16	0	16.25	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	9	1	10.29	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	9	0	7.69	
880	644523					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
881	729173					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
882	8315					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
883	450463					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	31	13	2.52	
884	650856					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
885	648109					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
886	726644					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	18	0	18.28	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	18		17.03
887	727224					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
888	557906					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
889	502683					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
890	728408					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	12		11.35
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	12	0	12.19	
891	647952					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
892	639991					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
893	735346					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
894	102655					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	0	14.8	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	0	15.03	
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	33		8.46
895	553629					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	17		4.19
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	17		3.96
896	1609					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	58		20.96
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	2	4.88	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	3	5.37	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	14	3	4.74	
897	641884					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
898	648872					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
899	644242					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
900	63559					
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	12		6.15
901	550108					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	37		5.75
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	19		3
902	374306					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
903	5838					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	9		9.76
904	645530					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
905	649732					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
906	649143					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
907	7571					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	8		8.67
908	4572					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	11		5.64
909	2147					
		01,02 (Colon, High Met vs. Colon, Low Met)	31	6	4.77	
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	2	5.85	
910	462659					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
911	727723					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
912	2636					
		08,09 (Lung, High Met vs. Lung, Low Met)	7	1	9.78	
		01,02 (Colon, High Met vs. Colon, Low Met)	8	19		2.57
913	500959					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
914	3428					
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	0	19.51	
915	734929					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
916	453592					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	6	3.35	
917	15414					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
918	648959					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
919	453470					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	1	12.88	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	1	12.68	
920	649272					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
921	1699					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
		03,04 (Breast, High Met vs. Breast, Non-Met)	37	12	3.01	
922	649719					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
923	562805					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
924	452204					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	3	13		4.29
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	
925	549178					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	10		9.85

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
926	639177					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
927	562550					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
928	561807					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
929	641373					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	0	16.1	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	3	5.28	
930	514418					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
931	567078					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	1	11.17	
932	643061					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
933	549160					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
934	449269					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	26	7	3.99	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	26	5	5.5	
935	453082					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
936	418135					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	23		3.77
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	23		21.43
937	2783					
		01,02 (Colon, High Met vs. Colon, Low Met)	27	6	4.15	
		03,04 (Breast, High Met vs. Breast, Non-Met)	5	40		8.2
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
938	549435					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	2	7.4	
939	446614					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
940	449477					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	12		5.59
941	454380					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	14		4.42
942	450914					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
943	736860					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
944	727224					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
945	644242					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
946	562550					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
947	649148					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
948	375889					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
949	449437					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	3	4.93	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	12		3.94
950	449044					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
951	555318					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	12		5.91
952	456764					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	1	15.03	
953	11567					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
954	3522					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	12		4.34
955	456528					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
956	639142					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
957	446371					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
958	554742					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
959	448029					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
960	551380					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	14		3.45
961	551527					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
962	729295					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
963	349744					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
964	648996					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
965	447126					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	5	4.02	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	5	20		3.94
966	730866					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
967	420686					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
968	451753					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	1	12		11.88
		15,16 (Normal Colon vs. Colon Tumor Tissue)	4	15		3.55
969	451380					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	20	7	3.02	
970	645530					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
971	554703					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38
972	562835					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38
973	732764					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
974	556216					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
975	728779					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
976	414739					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	14		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	14		6.52
977	551514					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	13		12.8
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
978	550107					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	36	14	2.72	
979	726786					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
980	456747					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
981	562550					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
982	549722					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
983	640525					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
984	455542					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
985	9436					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	15		3.69
986	380284					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	0	9.51	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	1	9.66	
987	556260					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
988	650476					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
989	554500					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
990	422375					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
991	456528					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
992	644190					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
993	554080					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
994	546705					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
995	558337					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
996	449269					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	26	7	3.99	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	26	5	5.5	
997	645799					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
998	456506					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	17	7	2.61	
999	218416					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6'		5.91

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1000	455820					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1001	554703					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38
1002	650204					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	0	11.81	
1003	456808					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	42		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	42	1	42.65	
1004	420686					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
1005	378373					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1006	463824					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1007	24939					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
1008	556561					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	10		9.85

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	10		9.32
1009	380406					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	12		3.94
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	3	5.64	
1010	456764					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	1	15.03	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
1011	725703					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
1012	185465					
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	14		7.17
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	14		3.45
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	25	9	2.81	
1013	5830					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1014	539955					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	24	0	24.37	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	0	11.81	
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	3	47		15.51
1015	640747					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1016	500630					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1017	448511					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	26		6.4
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	26		8.07
1018	405073					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1019	641439					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1020	406092					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	3	4.29	
1021	559806					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1022	380284					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	0	9.51	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	1	9.66	
1023	560700					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1024	552879					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	14		6.89
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	2	5.81	
1025	640590					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	
1026	641683					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1027	648934					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1028	557948					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
1029	377094					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
1030	449617					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	18		2.53
1031	978					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	67	20	3.6	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	67	28	2.53	
		03,04 (Breast, High Met vs. Breast, Non-Met)	78	23	3.31	
1032	607430					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1033	641837					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	16	0	17.17	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	31	0	31.48	
1034	449750					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	28		27.57
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	28		6.52
1035	646780					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1036	546642					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
1037	642906					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1038	552879					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	14		6.89
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	2	5.81	
1039	644205					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1040	506744					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1041	557797					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	16		5.25
1042	640356					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
1043	462659					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1044	645633					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1045	237288					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1046	454343					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	0	10.16	
1047	386543					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	23		7.55
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	23		7.14
1048	446404					
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	23	0	19.66	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	73	0	78.36	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	23	0	26.28	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	73	1	77.16	
1049	456528					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1050	456528					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1051	452781					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
1052	551671					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1053	644242					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1054	561892					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1055	450429					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	1	13.95	
1056	533588					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1057	553877					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1058	650195					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1059	193486					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1060	650195					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1061	562835					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38
1062	736816					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
1063	403632					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
1064	390124					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	0	8		7
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	18		2.79
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	5.98	
1065	390124					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	0	8		7
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	5.98	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	18		2.79

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1066	422687					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	10		9.46
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	0	10.16	
1067	394413					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	21	2	12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	113	3	39.81	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	113	0	121.29	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	21	0	17.95	
1068	549178					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	10		9.85
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
1069	453079					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
1070	463824					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1071	736595					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1072	102655					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	33		8.46
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	0	15.03	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	0	14.8	
1073	448606					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	20		6.21
1074	504513					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1075	20036					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	13		12.11
1076	530883					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1077	447126					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	5	4.02	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	5	20		3.94
1078	556561					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	10		9.32
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	10		9.85
1079	455096					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	10		4.92
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
1080	549320					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1081	560984					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1082	450791					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	18	6	3.17	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	18	3	6.44	
1083	16556					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
1084	402707					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
1085	557903					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
1086	451243					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1087	452506					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1088	554703					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
1089	449580					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	4	4.23	
1090	3316					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1091	97507					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	9		8.51
1092	556216					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1093	185401					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	63		64.57
1094	3758					
		03,04 (Breast, High Met vs. Breast, Non-Met)	17	5	3.32	
1095	95700					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	21		21.52
1096	2478					
		03,04 (Breast, High Met vs. Breast, Non-Met)	17	5	3.32	
1097	550267					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	4	4.03	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	1	15.85	
1098	185652					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
1099	55798					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
1100	5078					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1101	9784					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
1102	2245					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	1	12.68	
		01,02 (Colon, High Met vs. Colon, Low Met)	12	27		2.44
1103	11606					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1104	2245					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	1	12.68	
		01,02 (Colon, High Met vs. Colon, Low Met)	12	27		2.44
1105	551172					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
1106	729175					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1107	6317					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1108	2478					
		03,04 (Breast, High Met vs. Breast, Non-Met)	17	5	3.32	
1109	4727					
		03,04 (Breast, High Met vs. Breast, Non-Met)	19	0	18.54	
1110	185598					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	8		8.2
1111	736349					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1113	189561					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
		08,09 (Lung, High Met vs. Lung, Low Met)	1	14		10.02
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38
1114	728131					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1115	560984					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1116	549945					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	2	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	2	6.34	
1117	554785					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
1118	554785					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
1119	551235					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1120	2634					
		03,04 (Breast, High Met vs. Breast, Non-Met)	48	0	46.83	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1121	548858					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
1122	15625					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	17	0	18.25	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	17	1	17.97	
1123	649259					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1124	550267					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	1	15.85	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	4	4.03	
1125	7436					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
1126	451794					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	0	15.85	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	1	16.1	
1127	5744					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1128	3516					
		01,02 (Colon, High Met vs. Colon, Low Met)	5	17		3.69
1129	730555					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1130	3085					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	11		5.64
1131	638854					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	32	11	3.07	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	32	0	34.35	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
1132	7379					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1133	185562					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
1134	452491					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
1135	646248					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1136	6056					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
1137	643103					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1138	6923					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1139	6923					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1140	901					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	56	5	10.93	
1141	901					
		03,04 (Breast, High Met vs. Breast, Non-Met)	56	5	10.93	
1142	367					
		08,09 (Lung, High Met vs. Lung, Low Met)	30	99		2.36
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	4	3.44	
		03,04 (Breast, High Met vs. Breast, Non-Met)	105	24	4.27	
		01,02 (Colon, High Met vs. Colon, Low Met)	19	97		5.53
1143	4043					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	9		9.76
1144	3299					
		08,09 (Lung, High Met vs. Lung, Low Met)	10	1	13.97	
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	3	6.5	
1145	11881					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1146	9113					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
1147	185460					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	16		16.4
1148	185716					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
1149	5753					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	10		10.84
1150	24939					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1151	649684					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
1152	642109					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1153	15035					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
1154	649354					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1155	4465					
		01,02 (Colon, High Met vs. Colon, Low Met)	4	14		3.79
1156	647952					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1157	455601					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
1158	641901					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1159	446878					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	12		11.82
1160	7436					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
1161	2245					
		01,02 (Colon, High Met vs. Colon, Low Met)	12	27		2.44
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	1	12.68	
1162	3531					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	17		6.14
1163	9625					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	12		12.3
1164	727489					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
1165	159925					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	22		22.55
1166	645210					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	1	10.57	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
1167	157629					
		03,04 (Breast, High Met vs. Breast, Non-Met)	3	18		6.15
1168	8375					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
1169	4319					
		03,04 (Breast, High Met vs. Breast, Non-Met)	14	0	13.66	
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1170	4045					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		01,02 (Colon, High Met vs. Colon, Low Met)	2	11		5.96
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	1	9.76	
1171	185642					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
1172	7436					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
1173	3531					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	17		6.14
1174	644776					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
1175	8354					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
1176	2099					
		03,04 (Breast, High Met vs. Breast, Non-Met)	27	7	3.76	
1177	449956					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
1178	649106					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1179	452414					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	17	0	17.97	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	17	0	18.25	
1180	732712					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1181	185562					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
1182	3516					
		01,02 (Colon, High Met vs. Colon, Low Met)	5	17		3.69
1183	185562					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
1184	185460					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	16		16.4
1185	10947					
		03,04 (Breast, High Met vs. Breast, Non-Met)	8	0	7.81	
1186	452856					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1187	558767					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
1188	15035					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
1189	556421					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	1	12.68	
1190	7082					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	0	9.76	
1191	452523					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
1192	3242					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	17		9.22
1193	6660					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	0	6.46	
1194	547					
		01,02 (Colon, High Met vs. Colon, Low Met)	35	67		2.08
		03,04 (Breast, High Met vs. Breast, Non-Met)	90	30	2.93	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
1195	121213					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
1196	4378					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	11		5.42
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	8		8.2
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	2	5.81	
1197	185554					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
1198	185482					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	13		13.32
1200	66017					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	8		8.2
1201	403111					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1202	3224					
		01,02 (Colon, High Met vs. Colon, Low Met)	17	2	7.84	
1203	966					
		01,02 (Colon, High Met vs. Colon, Low Met)	22	47		2.32
		03,04 (Breast, High Met vs. Breast, Non-Met)	50	19	2.57	
1204	3639					
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	3	3.9	
1205	5388					
		03,04 (Breast, High Met vs. Breast, Non-Met)	5	21		4.3
1206	3299					
		08,09 (Lung, High Met vs. Lung, Low Met)	10	1	13.97	
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	3	6.5	
1207	23760					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	34		8.71
1208	729384					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1209	46559					
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	30		15.37
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
1210	449750					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	28		6.52
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	28		27.57
1211	735936					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
1212	607430					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1213	452856					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1214	557903					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
1215	453112					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	13		4.27
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	13		4.04
1216	645900					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	7	0	7.07	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
1217	415114					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	0	10.57	
1218	418763					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
1219	2245					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	1	12.68	
		01,02 (Colon, High Met vs. Colon, Low Met)	12	27		2.44
1220	403668					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	3	4.4	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	13		6.15
1221	15427					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
1222	555714					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	23	11	2.21	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	23	7	3.53	
1223	555830					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	16	2	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	2	8.46	
1224	4620					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
1225	171511					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1226	451401					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	1	9.66	
1227	447501					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	3	5.37	
1228	460445					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1229	375814					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
1230	449356					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	21		2.79
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	21		5.17
1231	468736					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1232	548858					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
1233	3693					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
1234	642973					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1235	561180					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	2	5.81	
1236	453708					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	19		18.71
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	19		17.7
1237	645305					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1238	463487					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1239	11131					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1240	561807					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1241	452800					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	13		4.04
1242	372960					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	18		2.79
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	33		5.2
1243	449317					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	5	20		3.73
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	20		2.46
1244	730759					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1245	9113					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
1246	630259					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1247	3516					
		01,02 (Colon, High Met vs. Colon, Low Met)	5	17		3.69
1248	447494					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	26	8	3.44	
1249	554500					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1250	639662					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1251	421					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1252	736014					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1253	643061					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
1254	9113					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
1255	650856					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1256	476223					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	2	19		9.4
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1257	737088					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1258	449512					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	14		3.26
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	14		13.79
1259	449457					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1260	521901					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1261	175799					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	3	4.93	
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	1	9		8.91
1262	550108					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	19		3
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	37		5.75
1263	203605					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	17	7	2.57	
1264	450429					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	1	13.95	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
1265	2478					
		03,04 (Breast, High Met vs. Breast, Non-Met)	17	5	3.32	
1266	644099					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1267	552614					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1268	452523					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
1269	446789					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	5	3.38	
1270	515631					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1271	452523					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
1272	640116					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	19	0	20.39	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	4	5.02	
1273	9113					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
1274	562221					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
1275	455972					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1276	449137					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	18		5.68
1277	5078					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1278	5078					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1279	4016					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
		01,02 (Colon, High Met vs. Colon, Low Met)	5	14		3.04
1280	403111					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1281	562292					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1282	403111					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1283	403111					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1284	500959					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
1285	763					
		01,02 (Colon, High Met vs. Colon, Low Met)	29	77		2.88
		03,04 (Breast, High Met vs. Breast, Non-Met)	42	10	4.1	
1286	763					
		03,04 (Breast, High Met vs. Breast, Non-Met)	42	10	4.1	
		01,02 (Colon, High Met vs. Colon, Low Met)	29	77		2.88

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1287	500959					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
1288	452071					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	109	0	117	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	14	0	11.97	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	109	1	115.21	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	14	0	16	
1289	468672					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
1290	455492					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
1291	639667					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
1292	549829					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1293	553158					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1294	561485					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1295	639352					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1296	451401					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	1	9.66	
1297	643103					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1298	468736					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1299	218416					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1300	447501					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	3	5.37	
1301	558371					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
1302	561794					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1303	645065					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1304	451269					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	3	4.58	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	4	3.49	
1305	401553					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1306	555276					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1307	551617					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	0	9.51	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1308	463480					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1309	549178					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	10		9.85
1310	374450					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1311	562835					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38
1312	730555					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1313	732978					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1314	1609					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	58		20.96
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	2	4.88	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	3	5.37	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	14	3	4.74	
1315	18591					
		08,09 (Lung, High Met vs. Lung, Low Met)	8	0	11.18	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	30	8	3.96	
1316	553158					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1317	470602					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	1	12.68	
1318	639662					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1319	644721					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1320	453202					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
1321	554655					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1322	641988					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1323	453112					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	13		4.27
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	13		4.04
1324	550694					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	21	1	22.2	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	21	7	3.22	
1325	649106					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1326	638973					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	12	0	12.19	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1327	549911					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1328	648774					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1329	549911					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1330	639662					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1331	560455					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1332	735805					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1333	732712					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1334	446663					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	32		2.13
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	32		5.25
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		10.7
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	1	8		9.36
1335	226324					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1336	453016					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1337	550998					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1338	452414					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	17	0	17.97	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	17	0	18.25	
1339	129535					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	41	1	44.01	
		08,09 (Lung, High Met vs. Lung, Low Met)	2	22		7.87
		15,16 (Normal Colon vs. Colon Tumor Tissue)	41	5	8.67	
1340	447089					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1341	447850					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1342	556216					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1343	452523					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
1344	44424					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	41	90		2.16
		08,09 (Lung, High Met vs. Lung, Low Met)	4	40		7.16
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	25	90		3.35
1345	648872					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1346	451636					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1347	5078					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1348	403111					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1349	648959					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1350	380291					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1351	380291					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1352	230995					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1353	562221					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
1354	450959					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	9		8.51
1355	452833					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1356	550195					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
1357	448927					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	12		5.59
1358	551514					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	13		12.8
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
1359	549829					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1360	551514					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	13		12.8
1361	561485					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1362	453846					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	11		10.25
1363	69863					
		08,09 (Lung, High Met vs. Lung, Low Met)	3	23		5.49
		03,04 (Breast, High Met vs. Breast, Non-Met)	3	21		7.17
1364	727181					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1365	454050					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
1366	725994					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1367	1495					
		03,04 (Breast, High Met vs. Breast, Non-Met)	31	12	2.52	
1368	5665					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	0	12.68	
1369	5665					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	0	12.68	
1370	646146					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1371	8371					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1372	73812					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	12		12.3
1373	4242					
		03,04 (Breast, High Met vs. Breast, Non-Met)	17	0	16.59	
1374	5482					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	8		8.67
1375	5474					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	8		8.67

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	5	17		3.48
1376	5448					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	10		10.84
1377	7607					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	3	4.65	
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	4	3.44	
1378	555928					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1379	4046					
		01,02 (Colon, High Met vs. Colon, Low Met)	4	14		3.79
1380	554080					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
1381	451092					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
1382	551380					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	14		3.45
1383	546642					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
1384	1764					
		03,04 (Breast, High Met vs. Breast, Non-Met)	27	4	6.59	
		01,02 (Colon, High Met vs. Colon, Low Met)	25	8	2.88	
1385	650773					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1386	644205					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1387	185718					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
1388	5538					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	8		8.67
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1389	7546					
		01,02 (Colon, High Met vs. Colon, Low Met)	8	0	7.38	
1390	727789					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1391	3837					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
1392	380477					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1393	3299					
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	3	6.5	
		08,09 (Lung, High Met vs. Lung, Low Met)	10	1	13.97	
1394	448853					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
1395	736701					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	10	0	10.1	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1396	735296					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1397	13666					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	9		9.22
1398	732712					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1399	3765					
		01,02 (Colon, High Met vs. Colon, Low Met)	19	6	2.92	
1400	185596					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	8		8.2
1401	1943					
		03,04 (Breast, High Met vs. Breast, Non-Met)	16	4	3.9	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	19		3
		01,02 (Colon, High Met vs. Colon, Low Met)	9	29		3.49
1402	448193					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	2	5.08	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
1403	1793					
		01,02 (Colon, High Met vs. Colon, Low Met)	13	27		2.25
		03,04 (Breast, High Met vs. Breast, Non-Met)	35	13	2.63	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1404	2475					
		03,04 (Breast, High Met vs. Breast, Non-Met)	5	35		7.17
1405	730866					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
1406	730389					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
1407	641884					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1408	463487					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
1409	5156					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	8		8.67
1410	728408					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	12		11.35
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	12	0	12.19	
1411	73812					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	12		12.3
1412	1662					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	34		5.27
		03,04 (Breast, High Met vs. Breast, Non-Met)	31	5	6.05	
1413	736556					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
1414	5240					
		08,09 (Lung, High Met vs. Lung, Low Met)	18	10	2.52	
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	2	5.85	
1415	6184					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	8		8.67
1416	446404					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	23	0	26.28	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	73	0	78.36	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	23	0	19.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	73	1	77.16	
1417	646825					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
1418	734929					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1419	648851					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1420	640135					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1421	7443					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	0	8.78	
1422	454050					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
1423	3765					
		01,02 (Colon, High Met vs. Colon, Low Met)	19	6	2.92	
1424	648320					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1425	451269					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	4	3.49	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	3	4.58	
1426	535208					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1427	728115					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1428	5240					
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	2	5.85	
		08,09 (Lung, High Met vs. Lung, Low Met)	18	10	2.52	
1429	909					
		08,09 (Lung, High Met vs. Lung, Low Met)	34	4	11.88	
		03,04 (Breast, High Met vs. Breast, Non-Met)	54	18	2.93	
1430	447697					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	11		5.2
1431	447737					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	6	3.35	
1432	651100					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1433	735477					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1434	3774					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	12		13.01
1435	646146					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1436	643931					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1437	463487					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
1438	650097					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1439	554469					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	24	3	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	24	8	3.17	
1440	476223					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	2	19		9.4
1441	8738					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1442	403978					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	23	50		2.15
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	19		2.57
1443	185539					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	10		10.25
1444	451811					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
1445	140731					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1446	734582					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1447	463487					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
1448	558719					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	18	6	3.17	
1449	21669					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1450	470462					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1451	3316					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1452	553728					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
1453	736014					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1454	237288					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1455	11141					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1456	556421					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	1	12.68	
1457	549435					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	2	7.4	
1458	448927					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	12		5.59
1459	379105					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
1460	552614					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1461	470602					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	1	12.68	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
1462	557039					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	16		7.88
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	2	5.81	
1463	549864					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1464	449836					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
1465	554812					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
1466	3316					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1467	649852					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1468	453592					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	6	3.35	
1469	455096					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	10		4.92
1470	446199					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1471	558427					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	4	15		3.55
1472	450255					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1473	452026					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	35	14	2.64	
1474	374971					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
		08,09 (Lung, High Met vs. Lung, Low Met)	0	16		11.45
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
1475	446404					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	73	0	78.36	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	23	0	19.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	73	1	77.16	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	23	0	26.28	
1476	549591					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	24		3.38
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	24		11.18
1477	640135					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1478	646248					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1479	639705					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	0	10.57	
1480	483084					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1481	464029					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
1482	428005					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
1483	91178					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1484	550571					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1485	735028					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1486	559409					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1487	551172					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
1488	648872					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1489	446404					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	23	0	26.28	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	23	0	19.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	73	1	77.16	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	73	0	78.36	
1490	734063					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1491	467991					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1492	454050					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
1493	734646					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	14		13.25
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	14	0	14.22	
1494	450192					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1495	403978					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	23	50		2.15
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	19		2.57
1496	734209					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
1497	14805					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	10		4.92
1498	230995					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1499	120049					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
1500	642142					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	11		5.2
1501	403978					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	19		2.57
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	23	50		2.15
1502	386543					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	23		7.14
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	23		7.55
1503	379105					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
1504	450255					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1505	730143					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1506	734209					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
1507	401553					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1508	72979					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	1	36		31.5
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	36	4	6.73	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	46	311		6.3
		08,09 (Lung, High Met vs. Lung, Low Met)	18	0	25.15	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	46	193		3.97
1509	726307					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1510	230995					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1511	3524					
		01,02 (Colon, High Met vs. Colon, Low Met)	21	6	3.23	
1512	8112					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	8	0	7.81	
1513	5240					
		08,09 (Lung, High Met vs. Lung, Low Met)	18	10	2.52	
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	2	5.85	
1514	447326					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1515	2676					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	17		9.22
1516	736701					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	10	0	10.1	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1517	736701					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	10	0	10.1	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1518	8371					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1520	185542					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	10		10.25
1521	448046					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	12		11.18
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	12		3.94
1522	185422					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	32		32.8
1523	650448					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1524	5753					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	10		10.84
1526	1644					
		03,04 (Breast, High Met vs. Breast, Non-Met)	27	57		2.16
		01,02 (Colon, High Met vs. Colon, Low Met)	11	33		3.25
1527	4453					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	2	4.88	
1528	454152					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	3	3.88	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	1	11.81	
1529	9913					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
1530	1350					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	44		15.9
1531	188					
		03,04 (Breast, High Met vs. Breast, Non-Met)	129	309		2.46
		21,22 (Normal Prostate vs. Prostate Cancer)	71	166		2.38
1532	4471					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	1	9.76	
1533	2622					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	31		4.54
1534	185465					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	25	9	2.81	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	14		3.45
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	14		7.17
1535	19205					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
1536	185635					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
1537	5289					
		03,04 (Breast, High Met vs. Breast, Non-Met)	19	2	9.27	
1538	779					
		01,02 (Colon, High Met vs. Colon, Low Met)	27	54		2.17
		03,04 (Breast, High Met vs. Breast, Non-Met)	60	22	2.66	
1539	779					
		01,02 (Colon, High Met vs. Colon, Low Met)	27	54		2.17
		03,04 (Breast, High Met vs. Breast, Non-Met)	60	22	2.66	
1540	5289					
		03,04 (Breast, High Met vs. Breast, Non-Met)	19	2	9.27	
1541	456808					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	42		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	42	1	42.65	
1543	546642					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
1544	649732					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1545	5240					
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	2	5.85	
		08,09 (Lung, High Met vs. Lung, Low Met)	18	10	2.52	
1546	448046					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	12		11.18
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	12		3.94
1547	650476					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1548	379341					
		08,09 (Lung, High Met vs. Lung, Low Met)	2	21		7.51
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	14		4.35
1549	401849					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	15		14.77
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1550	11452					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1551	185417					
		08,09 (Lung, High Met vs. Lung, Low Met)	8	56		5.01
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	32		8.2
1552	4471					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	1	9.76	
1553	2557					
		01,02 (Colon, High Met vs. Colon, Low Met)	23	8	2.65	
1554	3656					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		01,02 (Colon, High Met vs. Colon, Low Met)	2	12		6.5
1555	2327					
		03,04 (Breast, High Met vs. Breast, Non-Met)	8	19		2.43
		08,09 (Lung, High Met vs. Lung, Low Met)	10	2	6.99	
1556	449026					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
1557	730227					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1558	650864					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1559	530774					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	5	16		2.98
1560	395341					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1561	557906					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
1562	452531					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	11		5.2
1563	559057					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1564	448046					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	12		11.18
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	12		3.94
1565	553547					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1566	4636					
		03,04 (Breast, High Met vs. Breast, Non-Met)	3	15		5.12
1567	455601					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
1568	172013					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1569	552597					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1570	446531					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1571	639352					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1572	642604					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	0	13.2	
1573	558534					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1574	556421					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	1	12.68	
1575	735477					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1576	640703					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	0	10.16	
1577	643878					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1578	557797					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	16		5.25
1579	557200					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	10		9.85
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
1580	729531					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1581	734554					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1582	418008					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1583	558614					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
1584	452245					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	12		11.18
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	12		11.82
1585	449891					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
1587	6162					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	0	12.68	
1588	6162					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	0	12.68	
1589	4809					
		08,09 (Lung, High Met vs. Lung, Low Met)	3	27		6.44
		01,02 (Colon, High Met vs. Colon, Low Met)	15	1	13.84	
1590	3926					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
1591	185693					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
1592	641683					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
1593	11351					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1594	650864					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
1595	460445					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1596	447669					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	4	16		3.78
1597	227936					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
1598	639459					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	0	11.81	
1599	650195					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1600	734793					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
1601	540787					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1602	400654					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1603	731467					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1604	4045					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	1	9.76	
		01,02 (Colon, High Met vs. Colon, Low Met)	2	11		5.96
1605	447669					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	4	16		3.78
1606	11351					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1607	648931					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
1608	726786					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
1609	4508					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	12		13.01
1610	415058					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1611	450633					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	34	13	2.76	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	34	7	5.21	
1612	736955					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	13		12.3
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	0	13.2	
1613	729851					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1614	2512					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
1615	452704					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	1	10.57	
1616	4589					
		01,02 (Colon, High Met vs. Colon, Low Met)	14	2	6.46	
1617	4727					
		03,04 (Breast, High Met vs. Breast, Non-Met)	19	0	18.54	
1618	454380					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	14		4.42
1619	553912					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1620	450004					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	13		12.3
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	2	6.6	
1621	448193					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	2	5.08	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
1622	549591					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	24		11.18
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	24		3.38
1623	448511					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	26		8.07
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	26		6.4
1624	335					
		13,14 (bFGF Treated HMVEC vs. VEGF-Treated HMVEC)	3	15		4.92
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	38		3
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	41		3.18
		18,19 (Normal Colon Tissue vs. Colon Tumor)	0	29		25.38
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	29	4	5.42	
		12,14 (Untreated HMVEC vs. VEGF-Treated HMVEC) (Untreated HMVEC vs. VEGF-Treated HMVEC)	1	15		14.69
1625	561382					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	2	6.34	
1626	3447					
		08,09 (Lung, High Met vs. Lung, Low Met)	0	13		9.3
		01,02 (Colon, High Met vs. Colon, Low Met)	2	16		8.67
1627	639896					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
1628	1353					
		01,02 (Colon, High Met vs. Colon, Low Met)	39	13	2.77	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	37	17	2.12	
1629	3031					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	18		2.79
1630	557928					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1631	4727					
		03,04 (Breast, High Met vs. Breast, Non-Met)	19	0	18.54	
1632	4046					
		01,02 (Colon, High Met vs. Colon, Low Met)	4	14		3.79
1633	10882					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	20		3.42
1634	646283					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	0	9.51	
1635	646283					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	0	9.51	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
1636	139516					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
1637	6184					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	8		8.67
1638	6184					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	8		8.67
1639	454653					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	5	17		3.35
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	17		5.28
1640	3309					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	0	8.78	
		08,09 (Lung, High Met vs. Lung, Low Met)	10	38		2.72
1641	1037					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	22		5.64
1642	450665					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1643	726307					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1644	447669					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	4	16		3.78
1645	639651					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1646	736860					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1647	553705					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	0	12.68	
1648	451375					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	11		5.2

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1649	204862					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1650	530883					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1651	447539					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1652	455096					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	10		4.92
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
1654	449142					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	1	9.14	
1655	557401					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
1656	418763					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
1657	17649					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1658	2078					
		03,04 (Breast, High Met vs. Breast, Non-Met)	11	2	5.37	
1659	640370					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1660	449269					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	26	7	3.99	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	26	5	5.5	
1661	639029					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1662	448677					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	1	11.63	
1663	349					
		01,02 (Colon, High Met vs. Colon, Low Met)	69	138		2.17
		03,04 (Breast, High Met vs. Breast, Non-Met)	77	1	75.13	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1664	447494					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	26	8	3.44	
1665	551433					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
1666	414739					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	14		6.52
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	14		6.89
1667	640525					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1668	640525					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1669	233108					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	0	11.81	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	0	11.63	
1670	643594					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1671	1642					
		03,04 (Breast, High Met vs. Breast, Non-Met)	28	5	5.46	
1672	643804					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1673	449701					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	17		16.08
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	17	1	17.26	
1674	185695					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
1675	555830					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	2	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	16	2	8.59	
1676	227936					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
1677	1609					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	58		20.96
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	3	5.37	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	14	3	4.74	
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	2	4.88	
1678	643938					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1679	3656					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	12		6.5
1680	16576					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	8		8.2
1681	9784					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
1682	2557					
		01,02 (Colon, High Met vs. Colon, Low Met)	23	8	2.65	
1683	4620					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
1684	43642					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1685	555103					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	0	6		5.94
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1686	643341					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1687	185531					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	9		9.22
		08,09 (Lung, High Met vs. Lung, Low Met)	0	13		9.3
1688	4045					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	11		5.96
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	1	9.76	
1689	400258					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1690	96618					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	13		3.33
1691	646060					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	0	13.95	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	3	4.58	
1692	5665					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	0	12.68	
1693	149265					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	16		16.4
1694	727314					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1695	736349					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1696	648931					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
1697	553881					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	4	3.96	
1698	7444					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	0	8.78	
1699	150					
		03,04 (Breast, High Met vs. Breast, Non-Met)	51	24	2.07	
		08,09 (Lung, High Met vs. Lung, Low Met)	5	0	6.99	
1700	2889					
		01,02 (Colon, High Met vs. Colon, Low Met)	8	19		2.57
1701	730670					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1702	560984					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1703	453708					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	19		18.71
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	19		17.7
1704	48977					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1707	97507					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	9		8.51
1708	735966					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	7	0	7.07	
1709	35					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	12		5.59
		03,04 (Breast, High Met vs. Breast, Non-Met)	386	1967		5.22
		08,09 (Lung, High Met vs. Lung, Low Met)	868	11	110.27	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	14		6.62
1710	650195					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1711	639705					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	0	10.57	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
1712	185465					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	14		3.45
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	14		7.17
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	25	9	2.81	
1713	378525					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	1	9.14	
1714	2889					
		01,02 (Colon, High Met vs. Colon, Low Met)	8	19		2.57
1715	557686					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1716	735786					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1717	455145					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1718	639667					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
1719	446913					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	10	0	11.43	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	63	0	67.62	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	10	0	8.55	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	63	1	66.59	
1720	402494					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	13		4.1
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	3	4.4	
1721	734256					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1722	734256					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1723	559362					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1724	639651					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1725	419774					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	12		5.59
1726	555318					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	12		5.91
1727	449956					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
1728	558427					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	4	15		3.55
1729	7531					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	8		8.67
1730	446514					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
1731	456808					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	42	1	42.65	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	42		5.68
1732	447035					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
1733	446913					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	63	1	66.59	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	63	0	67.62	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	10	0	11.43	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	10	0	8.55	
1734	446900					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	11		5.42
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	11		10.25
1735	504513					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1736	380477					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1738	8259					
		01,02 (Colon, High Met vs. Colon, Low Met)	10	0	9.22	
		08,09 (Lung, High Met vs. Lung, Low Met)	13	49		2.7
1739	8259					
		01,02 (Colon, High Met vs. Colon, Low Met)	10	0	9.22	
		08,09 (Lung, High Met vs. Lung, Low Met)	13	49		2.7
1740	552968					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38
1741	650845					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1742	648594					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
1743	648594					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
1744	2796					
		03,04 (Breast, High Met vs. Breast, Non-Met)	8	37		4.74
1745	5753					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	10		10.84
1746	734256					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1747	449580					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	4	4.23	
1748	553705					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	0	12.68	
1749	730670					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1750	15035					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
1751	394436					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1752	726810					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1753	352763					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	10		9.85
1754	3506					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	10		10.25
1755	726377					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1756	562111					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	13		6.4
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	13		6.06
1757	404475					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	2	5.59	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	19	2	10.2	
1758	13824					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1759	558222					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1760	2834					
		01,02 (Colon, High Met vs. Colon, Low Met)	8	22		2.98
1761	453470					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	1	12.68	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	1	12.88	
1762	558682					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	12		3.94
1763	641710					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1764	640221					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1765	559057					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1766	551433					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
1767	5729					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	10		10.84
1768	352763					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	10		9.85
1769	375651					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
1770	644032					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	124	0	125.92	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	124		16.76
1771	185562					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
1772	736349					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1773	638870					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
1774	649719					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1775	62016					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1776	2889					
		01,02 (Colon, High Met vs. Colon, Low Met)	8	19		2.57
1777	647135					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1778	8283					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	8		8.67
1779	732121					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1780	532307					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1781	6589					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	9		9.76
1782	554678					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
1783	450410					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1784	643924					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1785	453719					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
1786	451811					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	2	5.37	
1787	453059					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	
1788	453457					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1789	558454					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1790	417467					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1791	447850					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1792	557948					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
1793	452685					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	. 5	3.17	
1794	446964					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
1795	550318					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	3	5.28	
1796	407077					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1797	650864					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1798	644721					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1799	485431					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1800	651073					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1801	725811					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1802	645139					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
1803	185478					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	14		14.35
1804	1441					
		01,02 (Colon, High Met vs. Colon, Low Met)	9	40		4.82
		03,04 (Breast, High Met vs. Breast, Non-Met)	38	16	2.32	
1805	640005					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	20	6	3.52	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	20	0	21.47	
1806	728273					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1807	185579					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	8		8.2
1808	724473					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		21,22 (Normal Prostate vs. Prostate Cancer)	5	16		3.25
1809	559674					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1810	456026					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	24	4	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	24	8	3.22	
1811	549320					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1812	447338					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1813	560700					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1814	3070					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1815	3070					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1816	380477					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1817	735040					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1818	378525					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	1	9.14	
1819	284586					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1820	640276					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
1821	3344					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	17		2.63
1822	555830					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	2	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	16	2	8.59	
1823	726307					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1824	416					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	23		2.72
		21,22 (Normal Prostate vs. Prostate Cancer)	11	31		2.87
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	22		2.56
1825	2543					
		01,02 (Colon, High Met vs. Colon, Low Met)	23	7	3.03	
1826	639352					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1827	453592					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	6	3.35	
1828	450633					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	34	13	2.76	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	34	7	5.21	
1829	448383					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	1	13.95	
1830	648719					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	
1831	730655					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1832	141185					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1833	640498					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1834	9029					
		01,02 (Colon, High Met vs. Colon, Low Met)	7	0	6.46	
1835	559674					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1836	555734					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	10		9.32
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	10		9.85
1837	1943					
		03,04 (Breast, High Met vs. Breast, Non-Met)	16	4	3.9	
		01,02 (Colon, High Met vs. Colon, Low Met)	9	29		3.49
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	19		3
1838	648320					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1839	558098					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1840	468672					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1841	456596					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	12		11.82
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	12		5.59
1842	649722					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1843	550708					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1844	643931					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1845	726927					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	11		10.41
1846	459012					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1847	397773					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	0	12.88	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
1848	450004					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	13		12.3
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	2	6.6	
1849	649732					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1850	553955					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1851	646309					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1852	402727					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	5	17		3.17
1853	468736					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1854	650422					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	18	6	3.17	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	18	0	19.32	
1855	730533					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1856	726307					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1857	450311					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
1858	450940					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
1859	726786					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
1860	7634					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1861	230995					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1862	374770					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
1863	9275					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
1864	553860					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38
1865	452010					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	3	4.4	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	13		4.1
1866	649560					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1867	452704					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	1	10.57	
1868	447594					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	11	2	6.29	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	20		3.11
1869	555444					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	22	4	5.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	22		10.41
1870	736556					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
1871	5289					
		03,04 (Breast, High Met vs. Breast, Non-Met)	19	2	9.27	
1872	732121					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1873	452567					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	14		4.6
		15,16 (Normal Colon vs. Colon Tumor Tissue)	21	3	7.4	
1874	551634					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1875	644099					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1876	726788					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1877	638802					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1878	646283					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	0	9.51	
1879	8403					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1880	2224					
		03,04 (Breast, High Met vs. Breast, Non-Met)	44	8	5.37	
1881	650053					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	1	10.57	
1882	380477					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1883	450867					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1884	456764					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	1	15.03	
1885	641373					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	3	5.28	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	15	0	16.1	
1886	555882					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
1887	644046					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
1888	447250					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1889	456596					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	12		5.59
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	12		11.82
1890	2218					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	21		11.38
		03,04 (Breast, High Met vs. Breast, Non-Met)	27	8	3.29	
		08,09 (Lung, High Met vs. Lung, Low Met)	5	0	6.99	
1891	446450					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	3	3.88	
1892	640889					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1893	530774					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	5	16		2.98
1894	649062					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1895	12808					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
1896	468672					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
1897	650773					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1898	732237					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1899	650773					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1900	550216					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1901	639189					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1902	3447					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	16		8.67
		08,09 (Lung, High Met vs. Lung, Low Met)	0	13		9.3
1903	2012					
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	58		2.97
		01,02 (Colon, High Met vs. Colon, Low Met)	13	29		2.42
1904	642876					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
1905	449690					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	17		5.58
1906	451208					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	3	5.01	
1907	725811					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1908	1256					
		08,09 (Lung, High Met vs. Lung, Low Met)	35	110		2.25
		03,04 (Breast, High Met vs. Breast, Non-Met)	14	31		2.27
1909	446599					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	2	6.87	
1910	446537					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1911	726281					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1912	11286					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1913	556082					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	10		9.85
1914	97507					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	9		8.51
1915	535955					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	10		9.85
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
1916	728251					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1917	733849					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1918	447574					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1919	7607					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	3	4.65	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	4	3.44	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
1920	644032					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	124		16.76
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	124	0	125.92	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1921	454087					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	3	4.93	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	1	15.03	
1922	412364					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1923	535208					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1924	644609					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
1925	645073					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1926	417467					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1927	554188					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1928	647185					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1929	736679					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1930	553547					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1931	641524					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1932	649717					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1933	451041					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1934	3483					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	20		7.23
1935	500959					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1936	500959					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
1937	697					
		03,04 (Breast, High Met vs. Breast, Non-Met)	30	72		2.46

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		21,22 (Normal Prostate vs. Prostate Cancer)	10	2	4.92	
1938	736955					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	0	13.2	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	13		12.3
1939	554742					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1940	642973					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
1941	449437					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	3	4.93	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	12		3.94
1942	467991					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
1943	650204					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	0	11.81	
1944	640618					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1945	452366					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1946	640276					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
1947	554101					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1948	185432					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	26		26.65
1949	455598					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1950	649354					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1951	4408					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	17		4.36
		08,09 (Lung, High Met vs. Lung, Low Met)	21	3	9.78	
1952	452366					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1953	452366					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
1954	727331					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1955	644853					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
1956	554079					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	10		4.92
1957	556245					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1958	557388					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	2	6.6	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	13		12.3
1959	449468					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
1960	556245					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1961	455327					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	12		11.18
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
1962	546632					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	3	34		11.22
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	15	0	15.23	
1963	558762					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
1964	550818					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
1965	554079					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	10		4.92
1966	452430					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1967	452430					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1968	556082					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	10		9.85
1969	514418					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
1970	426895					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	18		8.38
1971	560803					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1972	447737					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	6	3.35	
1973	373432					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	23	78		3.16
		15,16 (Normal Colon vs. Colon Tumor Tissue)	23	53		2.18
		08,09 (Lung, High Met vs. Lung, Low Met)	3	49		11.69
1974	779					
		03,04 (Breast, High Met vs. Breast, Non-Met)	60	22	2.66	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		01,02 (Colon, High Met vs. Colon, Low Met)	27	54		2.17
1975	455327					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	12		11.18
1976	554742					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
1977	455327					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	12		11.18
1978	11043					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
1979	727447					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1980	552905					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
1981	446900					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	11		5.42
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	11		10.25
1982	644190					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
1983	455327					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	12		11.18
1984	422375					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
1985	422375					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
1986	530774					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	5	16		2.98
1987	554101					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
1988	5268					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	15		16.26
1989	642461					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	14	0	15.03	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	0	10.16	
1990	770					
		03,04 (Breast, High Met vs. Breast, Non-Met)	47	9	5.1	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	1	11.81	
1991	3837					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
1992	561382					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	2	6.34	
1993	4408					
		08,09 (Lung, High Met vs. Lung, Low Met)	21	3	9.78	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	17		4.36
1994	5686					
		03,04 (Breast, High Met vs. Breast, Non-Met)	16	3	5.2	
1995	374609					
		21,22 (Normal Prostate vs. Prostate Cancer)	1	9		9.15
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
1996	734793					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
1997	452430					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
1998	450940					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
1999	460445					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2000	549041					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2001	555276					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2002	426895					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	18		8.38
2003	1833					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		01,02 (Colon, High Met vs. Colon, Low Met)	9	25		3.01
2004	446450					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	3	3.88	
2005	650517					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2006	554785					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
2007	607430					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2008	446673					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	1	8.12	
2009	734685					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2010	11630					
		21,22 (Normal Prostate vs. Prostate Cancer)	1	12		12.2
		03,04 (Breast, High Met vs. Breast, Non-Met)	3	13		4.44
2011	2930					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	14		5.06
2012	44424					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	41	90		2.16
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	25	90		3.35

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		08,09 (Lung, High Met vs. Lung, Low Met)	4	40		7.16
2013	452052					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	1	8.59	
2014	449356					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	21		2.79
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	4	21		5.17
2015	726225					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2016	453708					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	19		18.71
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	19		17.7
2017	447858					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
2018	451613					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	14		3.26
2019	650337					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2020	62016					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2021	447250					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
2022	3837					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
2023	640614					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	0	13.2	
2024	729531					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2025	729531					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2026	647952					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2027	446913					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	63	1	66.59	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	10	0	8.55	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	10	0	11.43	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	63	0	67.62	
2028	2675					
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	2	5.85	
2029	643481					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2030	1345					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		21,22 (Normal Prostate vs. Prostate Cancer)	18	6	2.95	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		08,09 (Lung, High Met vs. Lung, Low Met)	44	27	2.28	
		03,04 (Breast, High Met vs. Breast, Non-Met)	25	11	2.22	
2031	26					
		03,04 (Breast, High Met vs. Breast, Non-Met)	62	0	60.49	
		01,02 (Colon, High Met vs. Colon, Low Met)	0	28		30.36
2032	945					
		01,02 (Colon, High Met vs. Colon, Low Met)	10	21		2.28
2033	449169					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	2	8.46	
2034	394193					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2035	452212					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2036	394193					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2037	1310					
		03,04 (Breast, High Met vs. Breast, Non-Met)	42	16	2.56	
		21,22 (Normal Prostate vs. Prostate Cancer)	15	2	7.38	
2038	734094					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	6	0	6.06	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
2039	646579					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2040	4471					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	1	9.76	
2041	729173					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
2042	450323					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
2043	4652					
		03,04 (Breast, High Met vs. Breast, Non-Met)	16	2	7.81	
2044	553316					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
2045	642604					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	0	13.2	
2046	553316					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
2047	4097					
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	43		2.2
2048	6818					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	24	8	3.22	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	24	10	2.54	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
2049	395341					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
2050	649143					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2051	649143					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2052	648310					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2053	447574					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2054	648931					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
2055	6878					
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	11		5.64
2056	452238					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2057	1870					
		01,02 (Colon, High Met vs. Colon, Low Met)	11	31		3.06
		03,04 (Breast, High Met vs. Breast, Non-Met)	12	3	3.9	
2058	559259					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	17	5	3.59	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	5	21		4.14
2059	453457					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
2060	8868					
		08,09 (Lung, High Met vs. Lung, Low Met)	5	0	6.99	
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
2061	453059					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	
2062	236368					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	9	1	10.29	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	271	0	290.88	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	9	0	7.69	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	271	16	17.9	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	16	0	16.25	
2063	453059					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
2064	549979					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
2065	515631					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
2066	2235					
		03,04 (Breast, High Met vs. Breast, Non-Met)	36	12	2.93	
2067	448193					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	10		9.46
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	2	5.08	
2068	530774					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	5	16		2.98
2069	650204					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	0	11.81	
2070	644240					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2071	552614					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
2072	727331					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2073	185457					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	18		18.45
2074	454531					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
2075	643485					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	9	1	9.51	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	9	0	9.66	
2076	733669					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2077	452344					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2078	63602					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2079	454155					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	2	6.34	
2080	549903					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
2081	515631					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2082	6878					
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	11		5.64
2083	2977					
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	4	3.66	
2084	553823					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	24	7	3.62	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	24	6	4.29	
2085	3070					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2086	728884					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
2087	8166					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2088	644190					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2089	733669					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2090	728273					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
2091	406499					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2092	557720					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2093	732050					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
2094	450867					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
2095	650297					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2096	448064					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	3	3.88	
2097	452530					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
2098	7592					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
2099	733669					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2100	11028					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
2101	1013					
		01,02 (Colon, High Met vs. Colon, Low Met)	40	84		2.28
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2102	549265					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	3	3.88	
2103	376600					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
2104	643804					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2105	454927					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	14		4.6
2106	446528					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	0	10.57	
2107	2218					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	21		11.38
		08,09 (Lung, High Met vs. Lung, Low Met)	5	0	6.99	
		03,04 (Breast, High Met vs. Breast, Non-Met)	27	8	3.29	
2108	452704					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	1	10.57	
2109	84895					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	46	120		2.57
		08,09 (Lung, High Met vs. Lung, Low Met)	0	12		8.59
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	24	120		4.66
2110	157629					
		03,04 (Breast, High Met vs. Breast, Non-Met)	3	18		6.15
2111	2930					
		01,02 (Colon, High Met vs. Colon, Low Met)	3	14		5.06
2112	7037					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	9		9.76
2113	559806					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2114	452076					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	11	1	11.11	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	20	7	2.9	
2115	454869					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
2116	559674					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
2117	2235					
		03,04 (Breast, High Met vs. Breast, Non-Met)	36	12	2.93	
2118	7545					
		01,02 (Colon, High Met vs. Colon, Low Met)	9	0	8.3	
2119	729173					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
2120	650448					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2121	172013					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2122	651088					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2123	651088					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2124	726810					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
2125	406499					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2126	556325					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
2127	644836					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
2128	649062					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2129	454776					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	5	20		3.78
2130	377579					
		21,22 (Normal Prostate vs. Prostate Cancer)	25	53		2.16
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	13		6.06
2131	728131					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2132	475203					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	14		13.04
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	12		11.35

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
2133	727314					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
2134	552025					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	6	3.35	
2135	561382					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	2	6.34	
2136	732579					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2137	167					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	19		2.57
2138	185585					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	8		8.2
2139	728131					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2140	475203					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	14		13.04
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	12		11.35
2141	724616					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	8		7.57
2143	645222					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
2144	400362					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	35	117		3.29
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	21	117		5.19
2145	646583					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2146	475203					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	14		13.04
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	12		11.35
2147	550001					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	2	5.08	
2148	640703					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	0	10.16	
2149	646583					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2150	449468					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
2151	449468					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
2152	551628					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	38	5	8.03	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	38	13	3.14	
2153	449468					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
2154	417259					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	14		13.79
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	14		3.26
2155	448029					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	1	10.16	
2156	524363					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2157	446531					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2158	561359					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	2	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	3	4.29	
2159	711297					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	11		10.41
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
2160	650097					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2161	495715					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
2162	734685					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2163	560515					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2164	3441					
		03,04 (Breast, High Met vs. Breast, Non-Met)	8	0	7.81	
		01,02 (Colon, High Met vs. Colon, Low Met)	4	13		3.52
2165	729273					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	7	0	7.11	
2166	557039					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	16		7.88
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	2	5.81	
2167	711297					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	11		10.41
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
2168	711297					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	11		10.41
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
2169	2860					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	13		12.3

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	13		12.11
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	48		49.2
		01,02 (Colon, High Met vs. Colon, Low Met)	23	9	2.36	
2170	558534					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	7		6.89
2171	711297					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	11		10.41
2172	378457					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	9		8.51
2173	646583					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2174	646583					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2175	1996					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	4	3.3	
		03,04 (Breast, High Met vs. Breast, Non-Met)	34	139		4.19
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	13		6.15
		08,09 (Lung, High Met vs. Lung, Low Met)	20	13	2.15	
2176	7962					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
2177	645139					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	9.14	
2178	449468					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
2179	9898					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	14		3.59
2180	406499					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2181	1257					
		01,02 (Colon, High Met vs. Colon, Low Met)	46	20	2.12	
		21,22 (Normal Prostate vs. Prostate Cancer)	6	42		7.12
2182	549903					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
2183	557906					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	3	4.23	
2184	3538					
		01,02 (Colon, High Met vs. Colon, Low Met)	18	5	3.32	
2185	3114					
		03,04 (Breast, High Met vs. Breast, Non-Met)	9	1	8.78	
2186	426895					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	18		8.38
2187	923					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	23		3.11
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	23	9	2.6	
2188	645194					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2189	550161					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	4	15		3.55
2190	650119					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2191	642142					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	11		5.2
2192	419255					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	1	11.81	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	0	11.63	
2193	552905					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
2194	511997					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2195	551434					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	40	13	3.25	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	40	6	7.16	
2196	727447					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2197	378786					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
2198	649152					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2199	18853					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2200	643481					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2201	644417					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2202	726788					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2203	206					
		08,09 (Lung, High Met vs. Lung, Low Met)	19	4	6.64	
		03,04 (Breast, High Met vs. Breast, Non-Met)	166	79	2.05	
2204	395930					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2205	185589					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
2206	1441					
		01,02 (Colon, High Met vs. Colon, Low Met)	9	40		4.82
		03,04 (Breast, High Met vs. Breast, Non-Met)	38	16	2.32	
2207	14522					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	8		8.2
2208	203605					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	17	7	2.57	
2209	551527					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
2210	4509					
		08,09 (Lung, High Met vs. Lung, Low Met)	36	22	2.29	
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	40		41
2211	447737					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	19	6	3.35	
2212	447388					
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	18	0	15.39	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	142	2	75.05	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	142	4	38.1	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	18	0	20.57	
2213	451932					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	28	4	7.51	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	15	4	3.81	
2214	559043					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	50		4.48
		15,16 (Normal Colon vs. Colon Tumor Tissue)	54	11	5.19	
2215	380634					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	14		4.6

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
2216	495715					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	8		7.88
2217	451932					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	28	4	7.51	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	15	4	3.81	
2218	447939					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	14	1	14.8	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	8		7.88
2219	1181					
		03,04 (Breast, High Met vs. Breast, Non-Met)	17	58		3.5
2220	376600					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	7		6.62
2221	234761					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
2222	644417					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2223	639048					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2224	11452					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
2225	452076					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	11	1	11.11	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	20	7	2.9	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
2226	644523					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2227	554678					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
2228	3550					
		03,04 (Breast, High Met vs. Breast, Non-Met)	31	5	6.05	
2229	450311					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
2230	647280					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
2231	548858					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	11		10.83
2232	4204					
		01,02 (Colon, High Met vs. Colon, Low Met)	16	2	7.38	
2233	540690					
		23,24 (Normal Lung Tissue vs. Lung Tumor Tissue)	0	8		7.92
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
2234	404774					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	11	3	3.88	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	11	1	11.81	
2235	557823					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	9		8.86
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	9		8.38

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
2236	1458					
		03,04 (Breast, High Met vs. Breast, Non-Met)	20	3	6.5	
2237	485431					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2238	2245					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	1	12.68	
		01,02 (Colon, High Met vs. Colon, Low Met)	12	27		2.44
2239	3242					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	17		9.22
2240	648747					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2241	3805					
		01,02 (Colon, High Met vs. Colon, Low Met)	17	3	5.23	
2242	475203					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	12		11.35
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	14		13.04
2243	12018					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
2244	475203					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	12		11.35
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	14		13.04
2245	3805					
		01,02 (Colon, High Met vs. Colon, Low Met)	17	3	5.23	
2246	496132					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2247	650600					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2248	650749					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2249	223148					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	9		8.38
2250	449					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	14		4.35
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	14		4.42
2251	735620					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2252	650600					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2253	218					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	11		10.25
		03,04 (Breast, High Met vs. Breast, Non-Met)	127	49	2.53	
2254	4161					
		08,09 (Lung, High Met vs. Lung, Low Met)	31	2	21.66	
		01,02 (Colon, High Met vs. Colon, Low Met)	13	1	11.99	
2255	373202					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	5	22		4.1

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
2256	724339					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2257	113291					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	15		6.99
2258	736753					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	11		10.41
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
2259	650600					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2260	451569					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
2261	1297					
		03,04 (Breast, High Met vs. Breast, Non-Met)	30	14	2.09	
2263	63602					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	0	6		5.91
2264	2757					
		03,04 (Breast, High Met vs. Breast, Non-Met)	4	16		4.1
2265	373128					
		08,09 (Lung, High Met vs. Lung, Low Met)	4	29		5.19
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	14		3.26
2266	641479					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
2267	450380					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	31		7.22
		15,16 (Normal Colon vs. Colon Tumor Tissue)	4	23		5.44
2268	133512					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
		18,19 (Normal Colon Tissue vs. Colon Tumor)	0	8		7
2269	447211					
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	9	0	7.69	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	46	0	49.38	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	46	0	48.62	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	9	0	10.29	
2270	645222					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
2271	645222					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	11	0	11.17	
2272	17372					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2273	451619					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	24	9	2.82	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	9	39		4.27
2274	2510					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	1	12.68	
2275	643974					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	16	3	5.64	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	16	0	17.17	
2276	500630					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2277	3101					
		01,02 (Colon, High Met vs. Colon, Low Met)	4	19		5.15
2278	446938					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
2279	554469					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	24	3	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	24	8	3.17	
2280	554469					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	24	3	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	24	8	3.17	
2281	2894					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		03,04 (Breast, High Met vs. Breast, Non-Met)	22	4	5.37	
		08,09 (Lung, High Met vs. Lung, Low Met)	5	20		2.86
2282	650600					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2283	3101					
		01,02 (Colon, High Met vs. Colon, Low Met)	4	19		5.15
2284	554469					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	24	3	8.59	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	24	8	3.17	
2285	9910					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
2286	400608					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	21	7	3.22	
2287	555051					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	9		8.51
2288	185400					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	1	9		8.86
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	62		63.55
2289	3059					
		03,04 (Breast, High Met vs. Breast, Non-Met)	16	3	5.2	
2290	647185					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2291	1669					
		21,22 (Normal Prostate vs. Prostate Cancer)	0	34		34.57
		03,04 (Breast, High Met vs. Breast, Non-Met)	40	0	39.03	
		01,02 (Colon, High Met vs. Colon, Low Met)	11	29		2.86
2292	7158					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
2293	496132					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2294	378623					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	33		10.25
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	24		7.57
		08,09 (Lung, High Met vs. Lung, Low Met)	1	16		11.45
2295	1257					
		01,02 (Colon, High Met vs. Colon, Low Met)	46	20	2.12	
		21,22 (Normal Prostate vs. Prostate Cancer)	6	42		7.12
2296	648499					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	10	0	10.73	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	10	2	5.28	
2297	185627					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
2298	640005					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	20	6	3.52	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	20	0	21.47	
2299	553462					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	6	0	6.34	
2300	649852					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2301	422375					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	2	11		5.12
2302	10910					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
2303	2737					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	3	14		4.6
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	4	14		3.26
2304	3438					
		01,02 (Colon, High Met vs. Colon, Low Met)	5	14		3.04
2305	3438					
		01,02 (Colon, High Met vs. Colon, Low Met)	5	14		3.04
2306	3763					
		01,02 (Colon, High Met vs. Colon, Low Met)	19	6	2.92	
2307	648966					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2308	724339					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2309	451569					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	8		7.45
2310	554109					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	2	7.93	
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	2	11		5.42
2311	380339					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	166	57	3.08	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	166	51	3.49	
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	9	0	6.73	

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	18	0	15.39	
2312	729903					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2313	45					
		08,09 (Lung, High Met vs. Lung, Low Met)	374	1067		2.04
		15,16 (Normal Colon vs. Colon Tumor Tissue)	40	119		2.81
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	40	209		4.87
		18,19 (Normal Colon Tissue vs. Colon Tumor)	0	29		25.38
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	0	11		12.87
		03,04 (Breast, High Met vs. Breast, Non-Met)	649	1876		2.96
2314	454653					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	3	17		5.28
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	5	17		3.35
2315	11536					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
2316	373134					
		08,09 (Lung, High Met vs. Lung, Low Met)	2	45		16.1
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	24	73		2.83
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	28	73		2.57
2317	185691					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	6		6.15
2318	234761					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
2319	724339					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2320	732740					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2321	35895					
		21,22 (Normal Prostate vs. Prostate Cancer)	6	19		3.22
		15,16 (Normal Colon vs. Colon Tumor Tissue)	1	13		12.3
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	0	13.2	
2322	133512					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
		18,19 (Normal Colon Tissue vs. Colon Tumor)	0	8		7
2323	2974					
		01,02 (Colon, High Met vs. Colon, Low Met)	22	7	2.9	
2324	500					
		03,04 (Breast, High Met vs. Breast, Non-Met)	89	22	3.95	
		01,02 (Colon, High Met vs. Colon, Low Met)	34	114		3.64
2325	376919					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	24	61		2.5
		21,22 (Normal Prostate vs. Prostate Cancer)	4	13		3.3
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	21	61		2.71
2326	8403					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
2327	3643					
		01,02 (Colon, High Met vs. Colon, Low Met)	6	19		3.43
2328	447211					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	46	0	48.62	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	46	0	49.38	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	9	0	10.29	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	9	0	7.69	
2329	447211					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	46	0	49.38	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	9	0	10.29	
		18,20 (Normal Colon Tissue vs. Colon Metastasis)	9	0	7.69	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	46	0	48.62	
2330	14929					
		08,09 (Lung, High Met vs. Lung, Low Met)	23	16	2.01	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	13		6.15
2331	648934					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	0	8.46	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	8	0	8.59	
2332	731785					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2333	639908					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	13	4	3.44	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	13	0	13.95	
2334	344577					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	28	2	14.22	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	38	2	20.39	
2335	2906					
		01,02 (Colon, High Met vs. Colon, Low Met)	10	25		2.71
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
		03,04 (Breast, High Met vs. Breast, Non-Met)	2	15		7.69
2336	446938					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	8	1	8.46	
2337	2493					
		03,04 (Breast, High Met vs. Breast, Non-Met)	33	9	3.58	
2338	38					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	40	118		2.79
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	40	259		6.03
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	118	259		2.16
		19,20 (Colon Tumor Tissue vs. Colon Metastasis)	88	6	10.97	
		18,19 (Normal Colon Tissue vs. Colon Tumor)	3	88		25.67
2339	13818					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
2340	8371					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
2341	402494					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	3	13		4.1
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	13	3	4.4	
2342	731785					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
2343	4621					
		03,04 (Breast, High Met vs. Breast, Non-Met)	11	1	10.73	
2344	9750					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
2345	133512					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	0	8		7
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
2346	162626					
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	12		12.3
2347	730059					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	6	0	6.09	
2348	2069					
		01,02 (Colon, High Met vs. Colon, Low Met)	26	8	3	
		08,09 (Lung, High Met vs. Lung, Low Met)	21	6	4.89	
		03,04 (Breast, High Met vs. Breast, Non-Met)	1	47		48.17
2349	5868					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	2	4.88	
2350	2683					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		01,02 (Colon, High Met vs. Colon, Low Met)	3	22		7.95
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	2	6.34	
2351	380409					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	10	2	5.08	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	10		9.46
2352	639991					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
2353	535					
		03,04 (Breast, High Met vs. Breast, Non-Met)	87	13	6.53	
2354	14929					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	13		6.15
		08,09 (Lung, High Met vs. Lung, Low Met)	23	16	2.01	
2355	134702					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
2356	642477					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2357	14929					
		08,09 (Lung, High Met vs. Lung, Low Met)	23	16	2.01	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	13		6.15
2358	134702					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
2359	185649					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	7		7.17
2360	10702					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	15		15.37
2361	643955					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	0	12.88	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	0	12.68	
2362	643955					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	0	12.88	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	12	0	12.68	
2363	4455					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	1	12.68	
2364	185567					
		03,04 (Breast, High Met vs. Breast, Non-Met)	0	9		9.22
2365	9115					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	7		7.59
2366	14929					
		08,09 (Lung, High Met vs. Lung, Low Met)	23	16	2.01	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	13		6.15
2367	14929					
		08,09 (Lung, High Met vs. Lung, Low Met)	23	16	2.01	
		15,16 (Normal Colon vs. Colon Tumor Tissue)	2	13		6.15
2368	4181					
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	3	4.88	
2369	5206					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
2370	825					
		03,04 (Breast, High Met vs. Breast, Non-Met)	70	25	2.73	
		08,09 (Lung, High Met vs. Lung, Low Met)	13	3	6.06	
2371	825					
		08,09 (Lung, High Met vs. Lung, Low Met)	13	3	6.06	
		03,04 (Breast, High Met vs. Breast, Non-Met)	70	25	2.73	
2372	825					
		03,04 (Breast, High Met vs. Breast, Non-Met)	70	25	2.73	
		08,09 (Lung, High Met vs. Lung, Low Met)	13	3	6.06	
2373	2748					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	26		14.09
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	4	3.66	
2374	2748					
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	4	3.66	
		01,02 (Colon, High Met vs. Colon, Low Met)	2	26		14.09
2375	2748					
		01,02 (Colon, High Met vs. Colon, Low Met)	2	26		14.09
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	4	3.66	
2376	133512					
		18,19 (Normal Colon Tissue vs. Colon Tumor)	0	8		7
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	7		6.52
2377	2748					
		03,04 (Breast, High Met vs. Breast, Non-Met)	15	4	3.66	
		01,02 (Colon, High Met vs. Colon, Low Met)	2	26		14.09
2378	642477					

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2379	642477					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	7	0	7.4	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	7	0	7.51	
2380	2493					
		03,04 (Breast, High Met vs. Breast, Non-Met)	33	9	3.58	
2381	5796					
		08,09 (Lung, High Met vs. Lung, Low Met)	5	0	6.99	
		03,04 (Breast, High Met vs. Breast, Non-Met)	14	3	4.55	
2382	3782					
		03,04 (Breast, High Met vs. Breast, Non-Met)	21	0	20.49	
2383	884					
		03,04 (Breast, High Met vs. Breast, Non-Met)	51	20	2.49	
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
		21,22 (Normal Prostate vs. Prostate Cancer)	20	7	2.81	
		08,09 (Lung, High Met vs. Lung, Low Met)	10	63		4.51
2384	5860					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	2	4.88	
2385	5275					
		01,02 (Colon, High Met vs. Colon, Low Met)	11	2	5.07	
2386	3932					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	1	12.68	
2387	884					
		08,09 (Lung, High Met vs. Lung, Low Met)	10	63		4.51

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	1	10		9.32
		03,04 (Breast, High Met vs. Breast, Non-Met)	51	20	2.49	
		21,22 (Normal Prostate vs. Prostate Cancer)	20	7	2.81	
2388	4455					
		03,04 (Breast, High Met vs. Breast, Non-Met)	13	1	12.68	
2389	5860					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	2	4.88	
2390	5860					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	2	4.88	
2391	372791					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	0	12.88	
2392	5206					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	0	6.83	
2393	372791					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	12	0	12.88	
2394	2846					
		01,02 (Colon, High Met vs. Colon, Low Met)	8	19		2.57
2395	5275					
		01,02 (Colon, High Met vs. Colon, Low Met)	11	2	5.07	
2396	2846					
		01,02 (Colon, High Met vs. Colon, Low Met)	8	19		2.57

Table 7

ES #	CMCC#	ATCC Deposit#
85	5175	PTA-1313
86	5176	PTA-1314
87	5177	PTA-1315
88	5178	PTA-1316
89	5179	PTA-1317
90	5180	PTA-1318
91	5181	PTA-1319
92	5182	PTA-1320
93	5183	PTA-1321
94	5184	PTA-1322
95	5185	PTA-1323
96	5186	PTA-1324
97	5187	PTA-1325
98	5188	PTA-1326
99	5189	PTA-1327
100	5190	PTA-1328
101	5191	PTA-1329
102	5192	PTA-1330
103	5193	PTA-1331
104	5194	PTA-1332
105	5195	PTA-1333
106	5196	PTA-1334
107	5197	PTA-1335
108	5198	PTA-1336
109	5199	PTA-1372
110	5200	PTA-1373
111	5201	PTA-1374
112	5202	PTA-1375
113	5203	PTA-1376
114	5204	PTA-1377
115	5205	PTA-1378
116	5206	PTA-1379
117	5207	PTA-1380
118	5208	PTA-1381
122	5212	PTA-1382
123	5213	PTA-1383
124	5214	PTA-1384
125	5215	PTA-1385
126	5216	PTA-1386
127	5217	PTA-1387
128	5218	PTA-1388
129	5219	PTA-1389
130	5220	PTA-1390
131	5221	PTA-1391
132	5222	PTA-1392
133	5223	PTA-1393
134	5209	PTA-1431
135	5210	PTA-1432
136	5238	PTA-1497

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 85	M00057077B:D02	ES 109	M00027658B:G03
ES 85	M00057078D:C12	ES 109	M00027660C:E03
ES 85	M00057079D:E09	ES 109	M00027660C:E03
ES 85	M00057080C:C02	ES 109	M00027665B:D01
ES 85	M00057085A:A03	ES 109	M00027681D:D02
ES 85	M00057088B:C02	ES 109	M00027699D:D02
ES 85	M00057091A:C03	ES 109	M00027717C:G05
ES 85	M00057091A:C04	ES 109	M00027733D:D05
ES 85	M00057091C:E12	ES 109	M00027742C:B01
ES 85	M00057093B:F09	ES 109	M00027742C:B01
ES 85	M00057099C:C08	ES 109	M00027747D:D01
ES 85	M00057100C:E09	ES 109	M00027757A:B06
ES 85	M00057100D:B03	ES 109	M00027781D:E04
ES 85	M00057103A:E11	ES 109	M00027786D:B01
ES 85	M00057103A:H09	ES 109	M00027803A:H10
ES 85	M00057104B:F08	ES 109	M00027806C:H05
ES 85	M00057106B:A03	ES 109	M00027808D:G10
ES 85	M00057106C:E02	ES 109	M00027817B:B11
ES 85	M00057106D:B06	ES 109	M00027820C:C02
ES 85	M00057108B:F04	ES 109	M00027823C:G07
ES 85	M00057108D:E09	ES 109	M00027829C:D02
ES 85	M00057108D:E09	ES 109	M00027833C:D01
ES 85	M00057112D:B09	ES 110	M00042345A:F12
ES 85	M00057114D:B10	ES 110	M00042523A:C05
ES 85	M00057117D:G11	ES 110	M00042523C:E08
ES 85	M00057118C:C02	ES 110	M00042525D:E01
ES 85	M00057120D:E12	ES 110	M00042527B:D07
ES 85	M00057124B:D10	ES 110	M00042528C:F11
ES 85	M00057127A:F11	ES 110	M00042529C:G07
ES 85	M00057127B:G07	ES 110	M00042532A:F08
ES 85	M00057130C:H11	ES 110	M00042534A:B07
ES 85	M00057131C:B01	ES 110	M00042536D:F01
ES 85	M00057132C:F08	ES 110	M00042537A:H05
ES 85	M00057133D:F01	ES 110	M00042538B:E06
ES 85	M00057134A:C01	ES 110	M00042538D:A08
ES 85	M00057134C:A01	ES 110	M00042539C:E05
ES 85	M00057134D:G10	ES 110	M00042540A:H06
ES 85	M00057135D:H04	ES 110	M00042540D:F03
ES 85	M00057136A:F01	ES 110	M00042540D:H05
ES 85	M00057141B:B02	ES 110	M00042543C:H02
ES 85	M00057141D:D02	ES 110	M00042544B:D02
ES 85	M00057142A:A07	ES 110	M00042544C:F10
ES 85	M00057143C:E05	ES 110	M00042547A:A02
ES 85	M00057145A:D05	ES 110	M00042547B:D11
ES 85	M00057146D:C09	ES 110	M00042547C:F02

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 85	M00057147A:A01	ES 110	M00042551A:D09
ES 85	M00057150A:C10	ES 110	M00042556A:D04
ES 85	M00057151A:B04	ES 110	M00042563C:E02
ES 86	M00057154A:D06	ES 110	M00042563C:E02
ES 86	M00057154C:B04	ES 110	M00042563D:G09
ES 86	M00057161B:E09	ES 110	M00042564B:H11
ES 86	M00057162A:C07	ES 110	M00042565A:H03
ES 86	M00057162B:H02	ES 110	M00042565C:A08
ES 86	M00057162D:D10	ES 110	M00042567D:C01
ES 86	M00057163D:B01	ES 110	M00042570D:H02
ES 86	M00057165D:E12	ES 110	M00042573C:A07
ES 86	M00057167B:E12	ES 110	M00042574B:H08
ES 86	M00057167B:G12	ES 110	M00042575C:D01
ES 86	M00057167D:B07	ES 110	M00042693D:E04
ES 86	M00057170C:H03	ES 110	M00042694C:E02
ES 86	M00057174B:C06	ES 110	M00042695B:H05
ES 86	M00057174B:G12	ES 110	M00042700B:A01
ES 86	M00057174C:H12	ES 110	M00042700B:D03
ES 86	M00057180A:H11	ES 110	M00042700B:D03
ES 86	M00057181C:D06	ES 110	M00042700D:H05
ES 86	M00057182D:B11	ES 110	M00042704A:F04
ES 86	M00057189B:G05	ES 110	M00042704A:F09
ES 86	M00057191A:A03	ES 110	M00042704D:E02
ES 86	M00057192B:E02	ES 110	M00042705A:D02
ES 86	M00057192D:G02	ES 110	M00042706C:A04
ES 86	M00057196A:E03	ES 110	M00054596B:G11
ES 86	M00057196C:F04	ES 110	M00004101C:H01
ES 86	M00057203C:E06	ES 111	M00042711C:G11
ES 86	M00057208A:A02	ES 111	M00042711D:C04
ES 86	M00057208C:C06	ES 111	M00042712B:B10
ES 86	M00057208C:D08	ES 111	M00042717D:D04
ES 86	M00057211B:F07	ES 111	M00042718B:C03
ES 86	M00057211D:A06	ES 111	M00042720C:D06
ES 86	M00057215B:B02	ES 111	M00042720D:G10
ES 86	M00057217B:B07	ES 111	M00042721A:G07
ES 86	M00057218D:C01	ES 111	M00042727C:H12
ES 86	M00057223C:C06	ES 111	M00042728D:E07
ES 86	M00057224B:C10	ES 111	M00042732A:G09
ES 86	M00057226D:C05	ES 111	M00042735C:G02
ES 86	M00057229D:F06	ES 111	M00042735D:A07
ES 86	M00057230C:D12	ES 111	M00042738B:D10
ES 86	M00057231C:G09	ES 111	M00042739D:D01
ES 86	M00057231D:A09	ES 111	M00042741D:D10
ES 86	M00057232B:D06	ES 111	M00042742B:H03
ES 86	M00057233A:F07	ES 111	M00042742C:A06

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 86	M00057233B:E04	ES 111	M00042742D:D05
ES 86	M00057236B:H06	ES 111	M00042746B:F02
ES 86	M00057237A:B11	ES 111	M00042746D:B09
ES 86	M00057239A:G08	ES 111	M00042750D:B09
ES 86	M00057241B:B04	ES 111	M00042881D:C08
ES 86	M00057242B:F07	ES 111	M00042883A:F12
ES 87	M00057242D:B09	ES 111	M00042886C:C03
ES 87	M00057242D:H05	ES 111	M00042886C:F01
ES 87	M00057249A:C06	ES 111	M00042887C:D07
ES 87	M00057259A:H10	ES 111	M00042889B:A09
ES 87	M00057259B:B08	ES 111	M00042890D:C08
ES 87	M00057266C:D04	ES 111	M00042891B:C04
ES 87	M00057266C:G12	ES 111	M00042893B:C08
ES 87	M00057268C:E10	ES 111	M00042900C:C07
ES 87	M00057270B:H09	ES 111	M00042901B:A03
ES 87	M00057270C:E04	ES 111	M00042902A:C04
ES 87	M00057271C:E01	ES 111	M00042905A:F11
ES 87	M00057272A:B03	ES 111	M00042905C:C10
ES 87	M00057272C:H04	ES 111	M00042908D:G01
ES 87	M00057272D:A01	ES 111	M00042909B:G04
ES 87	M00057275B:A12	ES 111	M00042911A:H03
ES 87	M00057277B:C09	ES 111	M00042914D:B10
ES 87	M00057277B:E10	ES 111	M00054792D:E09
ES 87	M00057279A:G02	ES 111	M00054793D:B07
ES 87	M00057280C:A06	ES 111	M00054798D:F01
ES 87	M00057283A:E06	ES 111	M00054913C:G03
ES 87	M00057288D:E08	ES 111	M00054915D:E07
ES 87	M00057291C:B06	ES 111	M00054917B:F09
ES 87	M00057297A:F03	ES 111	M00054917D:D12
ES 87	M00057300B:F02	ES 111	M00054918C:D03
ES 87	M00057301B:H12	ES 112	M00054918D:C11
ES 87	M00057304A:E01	ES 112	M00055426B:B02
ES 87	M00057306B:H07	ES 112	M00055426C:H06
ES 87	M00057312B:E11	ES 112	M00055427A:F01
ES 87	M00057318B:B09	ES 112	M00055428C:A02
ES 87	M00057318C:A03	ES 112	M00055429A:H05
ES 87	M00057324A:D12	ES 112	M00055430B:H02
ES 87	M00057325C:C10	ES 112	M00055431C:E09
ES 87	M00057333A:F09	ES 112	M00055438C:C06
ES 87	M00057334B:F01	ES 112	M00055438C:H10
ES 87	M00057337B:G02	ES 112	M00055441B:D02
ES 87	M00057340B:C12	ES 112	M00055445D:G06
ES 87	M00042355A:G02	ES 112	M00055446C:B06
ES 87	M00042355D:C01	ES 112	M00055447D:H04
ES 87	M00042442D:A02	ES 112	M00055447D:H04

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 87	M00042444D:G05	ES 112	M00055448A:D08
ES 87	M00042444D:H08	ES 112	M00055448C:E07
ES 87	M00042450D:H10	ES 112	M00055450A:G09
ES 87	M00042453C:E01	ES 112	M00055450D:B08
ES 87	M00042460D:A07	ES 112	M00055451A:F07
ES 87	M00042517C:F07	ES 112	M00055451A:F11
ES 87	M00042518D:A06	ES 112	M00055451C:G11
ES 87	M00042520A:F04	ES 112	M00055453C:E01
ES 88	M00042520A:F09	ES 112	M00055453C:E01
ES 88	M00042520A:F09	ES 112	M00055454A:A07
ES 88	M00043296C:B10	ES 112	M00055454A:H11
ES 88	M00043300A:H11	ES 112	M00055454C:G05
ES 88	M00043301A:F06	ES 112	M00055456D:F12
ES 88	M00043301D:H09	ES 112	M00055463D:H10
ES 88	M00043304A:D01	ES 112	M00055464A:F05
ES 88	M00043304B:C05	ES 112	M00055466D:B08
ES 88	M00043304B:C05	ES 112	M00055470B:G01
ES 88	M00043306D:B07	ES 112	M00055491A:G08
ES 88	M00043309B:H07	ES 112	M00055494D:C09
ES 88	M00043310C:B03	ES 112	M00055495A:G02
ES 88	M00043313A:A03	ES 112	M00055495C:D05
ES 88	M00043313A:G07	ES 112	M00055495C:F03
ES 88	M00043313D:C06	ES 112	M00055495D:E02
ES 88	M00043314C:H04	ES 112	M00055496A:F09
ES 88	M00043317A:H01	ES 112	M00055496B:E07
ES 88	M00043317C:F04	ES 112	M00055496C:C09
ES 88	M00043323C:D04	ES 112	M00055498A:H09
ES 88	M00043324D:D04	ES 112	M00055500D:B05
ES 88	M00043327D:H02	ES 112	M00055504C:D08
ES 88	M00043327D:H02	ES 112	M00055505D:A10
ES 88	M00043336B:E08	ES 112	M00055508D:E03
ES 88	M00043338A:B03	ES 112	M00055509C:H09
ES 88	M00043338B:A03	ES 112	M00055510B:B07
ES 88	M00043345B:C03	ES 113	M00055511D:E09
ES 88	M00043347B:G12	ES 113	M00055512C:G06
ES 88	M00043349A:C08	ES 113	M00055512D:D07
ES 88	M00043350B:H06	ES 113	M00055512D:F08
ES 88	M00043350C:H09	ES 113	M00055513C:D06
ES 88	M00043352A:E09	ES 113	M00055514D:H05
ES 88	M00043352D:B05	ES 113	M00055516B:E08
ES 88	M00043354D:C01	ES 113	M00055517B:D03
ES 88	M00043355D:H11	ES 113	M00055519B:C06
ES 88	M00043361D:D05	ES 113	M00055519C:H07
ES 88	M00043365A:C06	ES 113	M00055520C:A06
ES 88	M00043374A:B02	ES 113	M00055522A:E07

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 88	M00043374B:B06	ES 113	M00055522D:C02
ES 88	M00043377A:C03	ES 113	M00055522D:C02
ES 88	M00043379D:C07	ES 113	M00055523D:C03
ES 88	M00043381B:E10	ES 113	M00055525C:B07
ES 88	M00043386D:A06	ES 113	M00055526D:F09
ES 88	M00043388D:C09	ES 113	M00055527C:E02
ES 88	M00043394D:B06	ES 113	M00055527C:E04
ES 88	M00043397B:B02	ES 113	M00055527D:G11
ES 88	M00043397C:B09	ES 113	M00055528C:F06
ES 88	M00043503C:C08	ES 113	M00055529D:B02
ES 88	M00043503C:E05	ES 113	M00055530D:B07
ES 89	M00043504C:G06	ES 113	M00055532C:G08
ES 89	M00043504D:G08	ES 113	M00055534C:H01
ES 89	M00043506A:H09	ES 113	M00055536C:E06
ES 89	M00043507A:D05	ES 113	M00055536C:F03
ES 89	M00043508A:A08	ES 113	M00055538B:H11
ES 89	M00043508D:C01	ES 113	M00055542C:C01
ES 89	M00054486A:B11	ES 113	M00055542C:F06
ES 89	M00054493A:A10	ES 113	M00055542D:A09
ES 89	M00054494A:E01	ES 113	M00055543A:C05
ES 89	M00054496A:B09	ES 113	M00055543A:C05
ES 89	M00054499B:E11	ES 113	M00055543C:G08
ES 89	M00054499B:E11	ES 113	M00055544A:E04
ES 89	M00054502A:D01	ES 113	M00055544B:B02
ES 89	M00054502C:E02	ES 113	M00055545C:H12
ES 89	M00054507A:C11	ES 113	M00055547D:D10
ES 89	M00054510D:H09	ES 113	M00055547D:E05
ES 89	M00054513A:A12	ES 113	M00055548A:F04
ES 89	M00054518D:D03	ES 113	M00055548C:E12
ES 89	M00054520C:B05	ES 113	M00055548C:E12
ES 89	M00054521D:F04	ES 113	M00055552A:C09
ES 89	M00054522B:H11	ES 113	M00055553B:H04
ES 89	M00054523D:A10	ES 113	M00055553D:C07
ES 89	M00054524D:B02	ES 113	M00055553D:H02
ES 89	M00054534D:D02	ES 113	M00055556C:H09
ES 89	M00054535C:H09	ES 113	M00055560B:B12
ES 89	M00054542C:A08	ES 114	M00055560B:F02
ES 89	M00054551C:G03	ES 114	M00055560C:F06
ES 89	M00054555C:G12	ES 114	M00055563A:A02
ES 89	M00054561D:E06	ES 114	M00055572A:B12
ES 89	M00054563B:C09	ES 114	M00055572C:F03
ES 89	M00054568A:G11	ES 114	M00055575A:D08
ES 89	M00054569A:H07	ES 114	M00055578A:H09
ES 89	M00054571C:C01	ES 114	M00055581D:B01
ES 89	M00054572B:C01	ES 114	M00055582B:E04

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 89	M00054575C:C01	ES 114	M00055583B:B04
ES 89	M00054580C:D11	ES 114	M00055583B:H05
ES 89	M00054583A:F05	ES 114	M00055584A:C11
ES 89	M00054587A:F09	ES 114	M00055584D:G06
ES 89	M00054590C:G02	ES 114	M00055586C:F05
ES 89	M00054591C:H07	ES 114	M00055586D:F02
ES 89	M00054595A:B02	ES 114	M00055591C:H01
ES 89	M00054595B:H09	ES 114	M00055592D:A05
ES 89	M00054596B:B07	ES 114	M00055594B:A01
ES 89	M00054600D:G07	ES 114	M00055597C:E08
ES 89	M00054601A:H10	ES 114	M00055601C:D09
ES 89	M00054601D:E08	ES 114	M00055602B:G10
ES 89	M00054602A:C04	ES 114	M00055602C:E07
ES 90	M00054602B:D02	ES 114	M00055609A:G03
ES 90	M00054604A:D09	ES 114	M00055609D:F12
ES 90	M00054604A:D09	ES 114	M00055613A:D10
ES 90	M00054605C:D01	ES 114	M00055613A:E02
ES 90	M00054609A:F01	ES 114	M00055618C:A06
ES 90	M00054609D:H06	ES 114	M00055628A:A08
ES 90	M00054611C:F02	ES 114	M00055630B:E09
ES 90	M00054613A:D09	ES 114	M00055633D:A02
ES 90	M00054613A:D09	ES 114	M00055633D:G11
ES 90	M00054617B:A09	ES 114	M00055635A:H10
ES 90	M00054621B:C06	ES 114	M00055635B:E10
ES 90	M00054621D:D11	ES 114	M00055635C:G04
ES 90	M00054629C:E09	ES 114	M00055636A:F10
ES 90	M00054636B:B03	ES 114	M00055647C:B04
ES 90	M00054636C:A02	ES 114	M00055653A:H04
ES 90	M00054636C:F02	ES 114	M00055656A:E09
ES 90	M00054638A:D09	ES 114	M00055662C:A04
ES 90	M00054638B:C08	ES 114	M00055664C:A08
ES 90	M00054646C:B01	ES 114	M00055668B:B07
ES 90	M00054647D:H02	ES 114	M00055679A:A07
ES 90	M00054648C:H10	ES 114	M00055681B:G02
ES 90	M00054660D:F05	ES 114	M00055685D:E01
ES 90	M00054665B:H08	ES 114	M00055686D:E11
ES 90	M00054665D:E11	ES 114	M00055687C:F01
ES 90	M00054677C:D02	ES 114	M00055688C:B04
ES 90	M00054678A:E07	ES 114	M00055689A:G12
ES 90	M00054679B:D12	ES 115	M00055689D:F02
ES 90	M00054680B:E06	ES 115	M00055689D:F07
ES 90	M00054680D:B11	ES 115	M00055691B:E07
ES 90	M00054681C:B02	ES 115	M00055692D:E07
ES 90	M00054684C:H12	ES 115	M00055701C:D10
ES 90	M00054689D:E12	ES 115	M00055703A:B08

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 90	M00054691A:E05	ES 115	M00055703B:B06
ES 90	M00054692B:D01	ES 115	M00055703B:C05
ES 90	M00054694D:G04	ES 115	M00055703C:G09
ES 90	M00054706B:C09	ES 115	M00055704C:D07
ES 90	M00054707B:B08	ES 115	M00055705C:G07
ES 90	M00054707B:E05	ES 115	M00055706A:A01
ES 90	M00054713A:D12	ES 115	M00055706B:G01
ES 90	M00054720D:D12	ES 115	M00055707D:C08
ES 90	M00054720D:F11	ES 115	M00055709B:G09
ES 90	M00054721C:F11	ES 115	M00055716C:B04
ES 90	M00054722C:D01	ES 115	M00055717B:F04
ES 90	M00054722D:C08	ES 115	M00055718A:F05
ES 90	M00054726A:F08	ES 115	M00055720B:G09
ES 90	M00054727D:E10	ES 115	M00055720C:A06
ES 90	M00054727D:H06	ES 115	M00055720D:A01
ES 90	M00054728B:E08	ES 115	M00055721B:F06
ES 91	M00054728D:B10	ES 115	M00055721B:F06
ES 91	M00054729A:E01	ES 115	M00055721C:E05
ES 91	M00054731C:C12	ES 115	M00055723A:B08
ES 91	M00054732D:E03	ES 115	M00055723D:E05
ES 91	M00054734D:H10	ES 115	M00055724D:D09
ES 91	M00054739A:G03	ES 115	M00055726B:B08
ES 91	M00054739C:D03	ES 115	M00055726C:D12
ES 91	M00054739C:E06	ES 115	M00055726C:G10
ES 91	M00054740A:H08	ES 115	M00055729D:A06
ES 91	M00054741A:C10	ES 115	M00055731A:H12
ES 91	M00054741A:E10	ES 115	M00055733A:G11
ES 91	M00054741D:G10	ES 115	M00055734C:H05
ES 91	M00054743C:E02	ES 115	M00055735C:C07
ES 91	M00054745D:A03	ES 115	M00055735C:G05
ES 91	M00054747A:F01	ES 115	M00055736A:D06
ES 91	M00054747D:C06	ES 115	M00055736B:G03
ES 91	M00054750C:D12	ES 115	M00055736C:G07
ES 91	M00054752B:A07	ES 115	M00055740B:B12
ES 91	M00054755B:H06	ES 115	M00055740B:F09
ES 91	M00054759A:B08	ES 115	M00055743B:C12
ES 91	M00054760A:A12	ES 115	M00055744B:C08
ES 91	M00054762B:F07	ES 115	M00055744C:F08
ES 91	M00054765B:C05	ES 115	M00055744C:F09
ES 91	M00054766C:B04	ES 115	M00055744D:G08
ES 91	M00054769A:F07	ES 115	M00055747C:D09
ES 91	M00054772C:C06	ES 115	M00055749D:H11
ES 91	M00054773A:A12	ES 116	M00055751C:D01
ES 91	M00054776B:F01	ES 116	M00055755C:D02
ES 91	M00054779A:F07	ES 116	M00055755D:H03

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 91	M00054780C:G08	ES 116	M00055761D:C03
ES 91	M00054781B:B04	ES 116	M00055763B:E06
ES 91	M00054802A:G02	ES 116	M00055765A:B05
ES 91	M00054804D:H12	ES 116	M00055766A:H03
ES 91	M00054808A:D07	ES 116	M00055768A:B05
ES 91	M00054808B:F08	ES 116	M00055770C:G01
ES 91	M00054810B:H02	ES 116	M00055771A:A11
ES 91	M00054812B:A05	ES 116	M00055771A:D01
ES 91	M00054812D:C07	ES 116	M00055771C:A11
ES 91	M00054812D:C07	ES 116	M00055771C:F05
ES 91	M00054815C:E01	ES 116	M00055771D:D04
ES 91	M00054816C:D11	ES 116	M00055771D:F07
ES 91	M00054821A:C11	ES 116	M00055774C:E01
ES 91	M00054823D:H07	ES 116	M00055774D:G03
ES 91	M00054826B:C10	ES 116	M00055775C:B10
ES 91	M00054826B:E05	ES 116	M00055775D:C06
ES 91	M00054826D:C10	ES 116	M00055778A:F09
ES 91	M00054827B:H01	ES 116	M00055779B:A02
ES 92	M00054832D:E09	ES 116	M00055780B:B07
ES 92	M00054836A:B05	ES 116	M00055780D:G08
ES 92	M00054839B:B02	ES 116	M00055781C:C05
ES 92	M00054839C:F06	ES 116	M00055782A:F02
ES 92	M00054841D:B07	ES 116	M00055783A:C11
ES 92	M00054841D:B07	ES 116	M00055785B:F03
ES 92	M00054842D:C11	ES 116	M00055785C:E08
ES 92	M00054844D:F06	ES 116	M00055786A:D05
ES 92	M00054849D:H11	ES 116	M00055788D:A03
ES 92	M00054851B:E03	ES 116	M00055790C:H02
ES 92	M00054854D:E08	ES 116	M00055791A:D05
ES 92	M00054856D:A02	ES 116	M00055791D:F03
ES 92	M00054857D:E12	ES 116	M00055792B:G09
ES 92	M00054862B:B07	ES 116	M00055792D:E07
ES 92	M00054863B:G03	ES 116	M00055794A:G11
ES 92	M00054865B:H04	ES 116	M00055794C:B06
ES 92	M00054866C:G07	ES 116	M00055796D:E10
ES 92	M00054867A:C07	ES 116	M00055797A:D08
ES 92	M00054867B:B02	ES 116	M00055797B:E07
ES 92	M00054867C:B07	ES 116	M00055798B:C06
ES 92	M00054869C:D01	ES 116	M00055800A:D08
ES 92	M00054870B:D09	ES 116	M00055800B:C08
ES 92	M00054875B:C04	ES 116	M00055802A:D08
ES 92	M00054876B:G03	ES 116	M00055802A:G02
ES 92	M00054877A:H12	ES 116	M00055802B:H04
ES 92	M00054895B:D09	ES 116	M00055802C:F12
ES 92	M00054899D:F07	ES 116	M00055803B:A11

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 92	M00054899D:G01	ES 117	M00055803C:D08
ES 92	M00054903D:C12	ES 117	M00055804A:F03
ES 92	M00054908B:F07	ES 117	M00055804B:F01
ES 92	M00054910D:G06	ES 117	M00055805B:C07
ES 92	M00054926D:F01	ES 117	M00055805C:D10
ES 92	M00054927B:E08	ES 117	M00055806A:H12
ES 92	M00054931C:A09	ES 117	M00055806B:F07
ES 92	M00054933A:D07	ES 117	M00055806C:E09
ES 92	M00054934C:D03	ES 117	M00055807B:G10
ES 92	M00054935A:E01	ES 117	M00055807B:G10
ES 92	M00054935A:G04	ES 117	M00055807D:C04
ES 92	M00054937A:B03	ES 117	M00055808C:G11
ES 92	M00054937B:A12	ES 117	M00055811A:A08
ES 92	M00054937B:F03	ES 117	M00055811D:C12
ES 92	M00054937C:B10	ES 117	M00055812A:E01
ES 92	M00054941C:G04	ES 117	M00055814C:D11
ES 92	M00054943C:C04	ES 117	M00055816B:F01
ES 92	M00054943D:C03	ES 117	M00055817B:F01
ES 92	M00054945C:G07	ES 117	M00055817C:C08
ES 92	M00054947B:G12	ES 117	M00055817C:D08
ES 92	M00054949A:E03	ES 117	M00055818A:F12
ES 93	M00054949C:A07	ES 117	M00055818D:E10
ES 93	M00054950D:G06	ES 117	M00055820A:E08
ES 93	M00054952A:F01	ES 117	M00055820B:E05
ES 93	M00054952C:H06	ES 117	M00055820C:C08
ES 93	M00054953D:G10	ES 117	M00055820D:G10
ES 93	M00054954B:C03	ES 117	M00055821A:A06
ES 93	M00054954D:F01	ES 117	M00055821A:G12
ES 93	M00054957A:B02	ES 117	M00055822B:H04
ES 93	M00054959C:C11	ES 117	M00055823B:D03
ES 93	M00054963C:H11	ES 117	M00055823C:D11
ES 93	M00054963D:H04	ES 117	M00055825B:E03
ES 93	M00054964A:H11	ES 117	M00055826A:F04
ES 93	M00054965B:H02	ES 117	M00055827B:D02
ES 93	M00054970D:G03	ES 117	M00055827D:A02
ES 93	M00054973B:A10	ES 117	M00055827D:C06
ES 93	M00054975C:C04	ES 117	M00055827D:E05
ES 93	M00054980D:C02	ES 117	M00055829C:G09
ES 93	M00054981C:E11	ES 117	M00055830A:G10
ES 93	M00054981D:C06	ES 117	M00055832D:E12
ES 93	M00054984D:B12	ES 117	M00055833D:A11
ES 93	M00054984D:C07	ES 117	M00055838B:D12
ES 93	M00054985C:F07	ES 117	M00055838B:G12
ES 93	M00054987D:C02	ES 117	M00055839A:F09
ES 93	M00054988C:G02	ES 117	M00055839B:A10

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 93	M00054995A:C10	ES 117	M00055840C:D06
ES 93	M00054996C:B11	ES 117	M00055841A:B09
ES 93	M00054996C:C09	ES 117	M00055841C:D05
ES 93	M00054997C:B12	ES 118	M00055848C:H06
ES 93	M00054997C:H03	ES 118	M00055849C:D08
ES 93	M00055000C:F04	ES 118	M00055850B:F03
ES 93	M00055002D:E04	ES 118	M00055851A:G11
ES 93	M00055005B:H11	ES 118	M00055851C:F12
ES 93	M00055005D:B08	ES 118	M00055851C:F12
ES 93	M00055008A:B08	ES 118	M00055852A:A07
ES 93	M00055008D:B09	ES 118	M00055854A:E04
ES 93	M00055011C:E04	ES 118	M00055856A:F04
ES 93	M00055017A:A11	ES 118	M00055856C:F07
ES 93	M00055021D:D11	ES 118	M00055860D:A08
ES 93	M00055022A:H04	ES 118	M00055861A:D03
ES 93	M00055027B:D07	ES 118	M00055864A:E11
ES 93	M00055027D:F08	ES 118	M00055864A:H02
ES 93	M00055032D:A06	ES 118	M00055866D:A02
ES 93	M00055034C:G01	ES 118	M00055868A:F06
ES 93	M00055034D:H01	ES 118	M00055868D:D03
ES 93	M00055037A:E10	ES 118	M00055868D:F09
ES 93	M00055039A:G01	ES 118	M00055869B:A06
ES 93	M00055039C:E02	ES 118	M00055871A:F05
ES 93	M00055041A:E02	ES 118	M00055871D:G06
ES 94	M00055042A:B01	ES 118	M00055872D:D12
ES 94	M00055046B:C07	ES 118	M00055873A:B11
ES 94	M00055046C:E11	ES 118	M00055873B:E03
ES 94	M00055050C:G04	ES 118	M00055874B:B06
ES 94	M00055053C:B03	ES 118	M00055874D:D03
ES 94	M00055054A:C02	ES 118	M00055879B:E11
ES 94	M00055056D:B06	ES 118	M00055879C:D04
ES 94	M00055057A:F03	ES 118	M00055880D:F12
ES 94	M00055063D:G01	ES 118	M00055882C:A06
ES 94	M00055064A:E12	ES 118	M00055882C:A09
ES 94	M00055071B:A02	ES 118	M00055884A:E10
ES 94	M00055073C:H12	ES 118	M00055884C:B01
ES 94	M00055075B:H05	ES 118	M00055884D:A05
ES 94	M00055077C:F11	ES 118	M00055886D:G09
ES 94	M00055085A:A10	ES 118	M00055887A:C06
ES 94	M00055087A:A10	ES 118	M00055887A:F07
ES 94	M00055088A:A12	ES 118	M00055887B:E04
ES 94	M00055088C:E09	ES 118	M00055888B:B05
ES 94	M00055093B:H05	ES 118	M00055889C:H12
ES 94	M00055094B:H09	ES 118	M00055891B:A04
ES 94	M00055097A:G06	ES 118	M00055893B:C05

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 94	M00055100B:D08	ES 118	M00055896C:F11
ES 94	M00055104C:B12	ES 118	M00055900B:B05
ES 94	M00055106A:D07	ES 118	M00055906B:D10
ES 94	M00055111B:D03	ES 118	M00055906C:F12
ES 94	M00055112A:C03	ES 118	M00055908B:H11
ES 94	M00055113B:A11	ES 118	M00055908C:E12
ES 94	M00055114D:A11	ES 122	M00056209B:F12
ES 94	M00055115A:E05	ES 122	M00056210B:E03
ES 94	M00055116B:B02	ES 122	M00056212C:G01
ES 94	M00055117C:C03	ES 122	M00056213A:A04
ES 94	M00055121D:C07	ES 122	M00056215A:E03
ES 94	M00055125B:E06	ES 122	M00056218C:G03
ES 94	M00055125B:F01	ES 122	M00056220D:D02
ES 94	M00055128D:B10	ES 122	M00056220D:D09
ES 94	M00055130D:G01	ES 122	M00056221D:E05
ES 94	M00055131C:B10	ES 122	M00056222C:F02
ES 94	M00055134B:E03	ES 122	M00056223B:G03
ES 94	M00055134B:H02	ES 122	M00056224C:B10
ES 94	M00055134D:B03	ES 122	M00056224D:E08
ES 94	M00055137C:C04	ES 122	M00056225D:G09
ES 94	M00055145A:F07	ES 122	M00056226C:F12
ES 94	M00055148D:D11	ES 122	M00056228B:A07
ES 94	M00055154C:F04	ES 122	M00056231B:G09
ES 94	M00055157A:C11	ES 122	M00056231B:G09
ES 94	M00055161D:A11	ES 122	M00056232C:E06
ES 94	M00055162A:F06	ES 122	M00056232D:G12
ES 94	M00055163A:C02	ES 122	M00056233D:F03
ES 95	M00055170A:F01	ES 122	M00056236D:G01
ES 95	M00055170D:E02	ES 122	M00056238B:E07
ES 95	M00055172D:D04	ES 122	M00056243C:G10
ES 95	M00055179C:D02	ES 122	M00056244A:B08
ES 95	M00055181A:E01	ES 122	M00056244B:C07
ES 95	M00055182B:C07	ES 122	M00056246A:B03
ES 95	M00055185C:B01	ES 122	M00056246C:G07
ES 95	M00055194D:C05	ES 122	M00056247A:G06
ES 95	M00055196B:A09	ES 122	M00056248A:A09
ES 95	M00055198D:F07	ES 122	M00056250B:F01
ES 95	M00055198D:G07	ES 122	M00056251C:A06
ES 95	M00055201D:A03	ES 122	M00056252B:H08
ES 95	M00055201D:B07	ES 122	M00056252D:E11
ES 95	M00055203B:H02	ES 122	M00056253A:F12
ES 95	M00055206A:H04	ES 122	M00056253D:H06
ES 95	M00055207D:A04	ES 122	M00056254A:H02
ES 95	M00055209D:A08	ES 122	M00056256C:H11
ES 95	M00055209D:D10	ES 122	M00056262B:B08

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 95	M00055216A:A03	ES 122	M00056263D:C01
ES 95	M00055216A:A03	ES 122	M00056267A:E02
ES 95	M00055222D:H05	ES 122	M00056267C:B02
ES 95	M00055227A:H09	ES 122	M00056268B:B04
ES 95	M00055227D:E02	ES 122	M00056268C:D01
ES 95	M00055227D:E07	ES 122	M00056273B:A01
ES 95	M00055231A:D10	ES 122	M00056281D:E04
ES 95	M00055242A:E06	ES 122	M00056282A:F11
ES 95	M00055242B:A01	ES 122	M00056282B:D04
ES 95	M00055242D:D04	ES 123	M00056282D:C01
ES 95	M00055243A:F04	ES 123	M00056282D:H09
ES 95	M00055243A:G01	ES 123	M00056283A:E02
ES 95	M00055245B:A09	ES 123	M00056283A:E02
ES 95	M00055247B:A11	ES 123	M00056283D:C03
ES 95	M00055252A:C02	ES 123	M00056286A:E08
ES 95	M00055259D:F04	ES 123	M00056286D:A12
ES 95	M00055260B:A05	ES 123	M00056290B:F05
ES 95	M00055260C:F12	ES 123	M00056290D:E08
ES 95	M00055262C:B11	ES 123	M00056290D:H02
ES 95	M00055263A:G09	ES 123	M00056291B:G01
ES 95	M00055271D:C05	ES 123	M00056291D:B05
ES 95	M00055273B:C05	ES 123	M00056292B:E05
ES 95	M00055274C:F02	ES 123	M00056293B:E08
ES 95	M00055279B:G08	ES 123	M00056293C:F05
ES 95	M00055279C:E12	ES 123	M00056293C:G09
ES 95	M00055283B:F05	ES 123	M00056295A:F07
ES 95	M00055283C:H02	ES 123	M00056295C:D06
ES 95	M00055289B:D02	ES 123	M00056300A:A05
ES 95	M00055294B:D04	ES 123	M00056302B:F12
ES 96	M00055302D:F02	ES 123	M00056303A:C03
ES 96	M00055306A:G09	ES 123	M00056303C:B04
ES 96	M00055319B:A01	ES 123	M00056304D:G11
ES 96	M00055322B:E01	ES 123	M00056307A:H12
ES 96	M00055324C:H10	ES 123	M00056310B:G06
ES 96	M00055325C:B12	ES 123	M00056312B:A04
ES 96	M00055327D:H08	ES 123	M00056312D:C03
ES 96	M00055332C:G11	ES 123	M00056313C:F07
ES 96	M00055334C:H09	ES 123	M00056319C:G01
ES 96	M00055335A:H03	ES 123	M00056320C:H02
ES 96	M00055338B:H07	ES 123	M00056323A:H10
ES 96	M00055344C:H09	ES 123	M00056323A:H10
ES 96	M00055345C:H11	ES 123	M00056323C:C12
ES 96	M00055346B:D02	ES 123	M00056323D:A07
ES 96	M00055350A:F01	ES 123	M00056324B:D02
ES 96	M00055356C:C06	ES 123	M00056330C:D03

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 96	M00055358B:C01	ES 123	M00056331B:D01
ES 96	M00055361D:H01	ES 123	M00056338B:B06
ES 96	M00055363D:G12	ES 123	M00056338C:B10
ES 96	M00055364D:E01	ES 123	M00056342A:G05
ES 96	M00055368B:C10	ES 123	M00056342B:G03
ES 96	M00055368C:B06	ES 123	M00056342C:F11
ES 96	M00055371B:F01	ES 123	M00056344A:G03
ES 96	M00055373D:D10	ES 123	M00056345D:E03
ES 96	M00055374A:A08	ES 123	M00056437C:H07
ES 96	M00055376B:B01	ES 123	M00056438C:A06
ES 96	M00055379D:C08	ES 123	M00056447B:A04
ES 96	M00055381B:E09	ES 123	M00056448B:C09
ES 96	M00055383B:B04	ES 124	M00056456C:A09
ES 96	M00055383B:B04	ES 124	M00056456C:F02
ES 96	M00055384D:A03	ES 124	M00056456D:F01
ES 96	M00055385C:G06	ES 124	M00056459A:C07
ES 96	M00055388A:G08	ES 124	M00056459A:C07
ES 96	M00055388A:H08	ES 124	M00056459A:D07
ES 96	M00055390B:D08	ES 124	M00056460A:G11
ES 96	M00055391A:G08	ES 124	M00056466A:A03
ES 96	M00055391C:G06	ES 124	M00056466A:E02
ES 96	M00055395A:C02	ES 124	M00056467C:E07
ES 96	M00055396A:G07	ES 124	M00056475B:C12
ES 96	M00055404D:C07	ES 124	M00056475C:F01
ES 96	M00055405A:D09	ES 124	M00056475C:F02
ES 96	M00055405B:H05	ES 124	M00042432C:H10
ES 96	M00055405D:G07	ES 124	M00042440A:E05
ES 96	M00055406B:D05	ES 124	M00042461A:A10
ES 96	M00055408B:E09	ES 124	M00042463A:F09
ES 96	M00055408D:F03	ES 124	M00042466D:H06
ES 96	M00055413A:B07	ES 124	M00042469D:H04
ES 96	M00055414C:A11	ES 124	M00042511A:A04
ES 97	M00055415B:H11	ES 124	M00042513D:A12
ES 97	M00055417A:G08	ES 124	M00042515C:A10
ES 97	M00055419D:G01	ES 124	M00042756B:B01
ES 97	M00055420A:E06	ES 124	M00042758D:H12
ES 97	M00055420B:F10	ES 124	M00042760B:C07
ES 97	M00055420D:G04	ES 124	M00042764B:B04
ES 97	M00055421B:D04	ES 124	M00042767D:D02
ES 97	M00055421C:C11	ES 124	M00042770B:B12
ES 97	M00055423A:A10	ES 124	M00042771B:A03
ES 97	M00055423A:G08	ES 124	M00042777A:D06
ES 97	M00055423C:H10	ES 124	M00042781C:A06
ES 97	M00055425D:C05	ES 124	M00042783C:A03
ES 97	M00055472A:F02	ES 124	M00042787C:E09

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 97	M00055472B:H03	ES 124	M00042792C:G10
ES 97	M00055475D:G08	ES 124	M00042792D:F04
ES 97	M00055479A:G02	ES 124	M00042793B:G06
ES 97	M00055479C:C12	ES 124	M00042800A:A03
ES 97	M00055480C:H10	ES 124	M00042801B:B06
ES 97	M00055482D:A01	ES 124	M00042802C:G11
ES 97	M00055484A:G07	ES 124	M00042805A:E06
ES 97	M00055485A:C09	ES 124	M00042805D:H08
ES 97	M00055487B:F06	ES 124	M00042814D:B11
ES 97	M00001340A:E01	ES 124	M00042816B:F04
ES 97	M00001470C:G01	ES 124	M00042818A:E12
ES 97	M00001470C:G01	ES 124	M00042823B:G04
ES 97	M00001491B:C08	ES 124	M00042826B:C05
ES 97	M00001537D:F10	ES 124	M00042826D:C03
ES 97	M00001537D:F10	ES 124	M00042833D:G01
ES 97	M00001561B:G01	ES 125	M00042834C:B06
ES 97	M00001625A:B08	ES 125	M00042835C:C01
ES 97	M00001637A:D09	ES 125	M00042835D:D02
ES 97	M00003792B:A11	ES 125	M00042838D:E11
ES 97	M00003794C:D07	ES 125	M00042842A:C01
ES 97	M00003804D:A09	ES 125	M00042842D:E08
ES 97	M00003922B:H03	ES 125	M00042844C:C12
ES 97	M00003948A:B12	ES 125	M00042846C:D09
ES 97	M00003986D:G12	ES 125	M00042848D:G12
ES 97	M00003986D:G12	ES 125	M00042849D:F11
ES 97	M00004054C:G05	ES 125	M00042850B:C04
ES 97	M00004066C:D02	ES 125	M00042850C:C10
ES 97	M00004080A:A05	ES 125	M00042853A:G03
ES 97	M00004087D:B11	ES 125	M00042853D:A04
ES 97	M00004093D:C10	ES 125	M00042855A:B09
ES 97	M00004167C:D11	ES 125	M00042856C:F07
ES 97	M00004167C:D11	ES 125	M00042864A:E05
ES 97	M00004198B:A11	ES 125	M00042867D:H01
ES 97	M00004296D:G11	ES 125	M00042869C:E06
ES 98	M00004304A:D07	ES 125	M00042875C:E04
ES 98	M00004842C:B07	ES 125	M00042879B:F09
ES 98	M00004850C:G05	ES 125	M00056346C:C12
ES 98	M00004852D:A04	ES 125	M00056351B:D06
ES 98	M00004868B:D12	ES 125	M00056356B:F04
ES 98	M00004869D:D06	ES 125	M00056359C:A11
ES 98	M00004971B:G04	ES 125	M00056362D:G05
ES 98	M00004972C:E01	ES 125	M00056363A:B06
ES 98	M00005000B:H08	ES 125	M00056368C:F04
ES 98	M00005019D:D02	ES 125	M00056369B:D12
ES 98	M00005293B:D06	ES 125	M00056370B:G02

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 98	M00005309D:E05	ES 125	M00056371B:F12
ES 98	M00005312A:D10	ES 125	M00056372B:C10
ES 98	M00005313C:B02	ES 125	M00056374B:H02
ES 98	M00005359A:A06	ES 125	M00056382C:H02
ES 98	M00005373D:H06	ES 125	M00056383A:C10
ES 98	M00005385C:A10	ES 125	M00056410B:E04
ES 98	M00005389C:C11	ES 125	M00056411C:E04
ES 98	M00005395A:D09	ES 125	M00056414B:A05
ES 98	M00005406C:A11	ES 125	M00056416C:B12
ES 98	M00005407B:E12	ES 125	M00056420C:D07
ES 98	M00005411C:C07	ES 125	M00056421A:F12
ES 98	M00005413B:F03	ES 125	M00056424A:F12
ES 98	M00005415C:F12	ES 125	M00056424B:H06
ES 98	M00005420B:C01	ES 125	M00056424D:A10
ES 98	M00005438B:A06	ES 125	M00056425A:H08
ES 98	M00005445C:A02	ES 125	M00056425D:B03
ES 98	M00005447C:D01	ES 125	M00056434A:C08
ES 98	M00005449C:E10	ES 125	M00056434D:E07
ES 98	M00005454B:C03	ES 126	M00056480B:C12
ES 98	M00005459B:B01	ES 126	M00056480D:A10
ES 98	M00005469B:A07	ES 126	M00056481A:F02
ES 98	M00005481D:C06	ES 126	M00056483D:F06
ES 98	M00005485B:B05	ES 126	M00056484B:G02
ES 98	M00005485D:A09	ES 126	M00056485B:B12
ES 98	M00005491B:H12	ES 126	M00056490D:E02
ES 98	M00005491D:B03	ES 126	M00056491D:G08
ES 98	M00005500B:E03	ES 126	M00056496B:A01
ES 98	M00005501B:E05	ES 126	M00056496C:H09
ES 98	M00005501D:G09	ES 126	M00056499C:F05
ES 98	M00005513B:F09	ES 126	M00056501C:H07
ES 98	M00005514C:A06	ES 126	M00056503B:G11
ES 98	M00005515B:H04	ES 126	M00056503B:G11
ES 98	M00005516D:H06	ES 126	M00056505B:H02
ES 98	M00005517B:F04	ES 126	M00056505D:D07
ES 98	M00005520C:E12	ES 126	M00056506C:G12
ES 98	M00005530C:A07	ES 126	M00056507D:B10
ES 98	M00005545B:A08	ES 126	M00056508B:B10
ES 99	M00005546A:G02	ES 126	M00056511A:H12
ES 99	M00005548A:A02	ES 126	M00056512B:C06
ES 99	M00005563C:B12	ES 126	M00056512C:E09
ES 99	M00005565A:F05	ES 126	M00056512D:C12
ES 99	M00005568C:B09	ES 126	M00056514B:E08
ES 99	M00007926A:A07	ES 126	M00056514C:G01
ES 99	M00007926D:A05	ES 126	M00056515C:C05
ES 99	M00007927C:C01	ES 126	M00056517B:G03

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 99	M00007931A:A10	ES 126	M00056519C:H01
ES 99	M00007935D:A05	ES 126	M00056526C:E11
ES 99	M00007936D:B09	ES 126	M00056529D:F12
ES 99	M00007936D:B09	ES 126	M00056529D:H09
ES 99	M00007939B:A03	ES 126	M00056530A:D01
ES 99	M00007943A:C02	ES 126	M00056532B:G06
ES 99	M00007951C:A05	ES 126	M00056534A:D11
ES 99	M00007953B:A01	ES 126	M00056537B:H05
ES 99	M00007953D:H09	ES 126	M00056537C:A09
ES 99	M00007954C:B04	ES 126	M00056541B:A08
ES 99	M00007961B:F05	ES 126	M00056547A:C04
ES 99	M00007964B:G01	ES 126	M00056548A:C11
ES 99	M00007965A:G10	ES 126	M00056551A:F02
ES 99	M00007965B:C03	ES 126	M00056552A:A10
ES 99	M00007965B:C03	ES 126	M00056552D:B10
ES 99	M00007981D:B04	ES 126	M00056555A:F09
ES 99	M00007982A:F11	ES 126	M00056556C:G01
ES 99	M00007983B:D03	ES 126	M00056557C:D02
ES 99	M00007983D:H06	ES 126	M00056561C:D08
ES 99	M00007990D:D03	ES 126	M00056564C:E09
ES 99	M00007991D:G01	ES 126	M00056566C:H01
ES 99	M00007992D:G08	ES 127	M00056574B:A07
ES 99	M00007994A:C11	ES 127	M00056580B:F10
ES 99	M00007994D:A05	ES 127	M00056591C:E03
ES 99	M00007998C:F07	ES 127	M00056592A:F04
ES 99	M00005589C:F07	ES 127	M00056592C:C03
ES 99	M00005610D:B11	ES 127	M00056592D:D07
ES 99	M00005619B:A09	ES 127	M00056592D:D07
ES 99	M00005621A:H08	ES 127	M00056593B:E05
ES 99	M00005627B:B10	ES 127	M00056594C:C06
ES 99	M00005628B:C10	ES 127	M00056594C:C10
ES 99	M00005632A:H02	ES 127	M00056595A:A02
ES 99	M00005650C:A06	ES 127	M00056595A:C07
ES 99	M00005650C:D04	ES 127	M00056595B:F02
ES 99	M00005655B:F08	ES 127	M00056596A:E02
ES 99	M00005675A:G02	ES 127	M00056596C:E06
ES 99	M00005685D:D12	ES 127	M00056596C:H08
ES 99	M00005704C:D10	ES 127	M00056597A:F07
ES 99	M00005708B:B07	ES 127	M00056597D:C02
ES 100	M00042455C:D11	ES 127	M00056599D:D11
ES 100	M00054826A:B05	ES 127	M00056600D:H07
ES 100	M00055281A:E08	ES 127	M00056603C:D01
ES 100	M00005657D:A12	ES 127	M00056608C:E04
ES 100	M00005710A:D01	ES 127	M00056610B:H12
ES 100	M00005765D:F07	ES 127	M00056613A:A05

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 100	M00005766C:F10	ES 127	M00056616B:C08
ES 100	M00005769B:A03	ES 127	M00056616D:A10
ES 100	M00005782A:B10	ES 127	M00056617B:H06
ES 100	M00005800D:D11	ES 127	M00056618A:B02
ES 100	M00005802B:H10	ES 127	M00056618B:F06
ES 100	M00005810B:F07	ES 127	M00056618D:F11
ES 100	M00005810B:G10	ES 127	M00056620D:E12
ES 100	M00005813B:E10	ES 127	M00056622D:C03
ES 100	M00005818D:B09	ES 127	M00056624D:H05
ES 100	M00005819C:B11	ES 127	M00056628C:F01
ES 100	M00005826D:G10	ES 127	M00056631B:G05
ES 100	M00005830C:D10	ES 127	M00056631D:C08
ES 100	M00006576A:B04	ES 127	M00056631D:D03
ES 100	M00006583B:H03	ES 127	M00056633B:B07
ES 100	M00006587B:A08	ES 127	M00056635A:A11
ES 100	M00006588A:H06	ES 127	M00056635A:E09
ES 100	M00006590A:C10	ES 127	M00056638A:D08
ES 100	M00006610C:D08	ES 127	M00056638B:B01
ES 100	M00006630D:C11	ES 127	M00056639A:E02
ES 100	M00006638A:G02	ES 127	M00056643D:G06
ES 100	M00006641C:H03	ES 127	M00056645C:B11
ES 100	M00006641C:H03	ES 127	M00056645D:F06
ES 100	M00006648B:A05	ES 127	M00056646C:C02
ES 100	M00006649D:B11	ES 127	M00056646D:G05
ES 100	M00006650A:A03	ES 128	M00056652D:F04
ES 100	M00006650D:D05	ES 128	M00056656C:H03
ES 100	M00006664A:B09	ES 128	M00056659C:G08
ES 100	M00006679D:C04	ES 128	M00056661B:A09
ES 100	M00006686B:B07	ES 128	M00056661D:E05
ES 100	M00006695D:H08	ES 128	M00056662B:F03
ES 100	M00006695D:H08	ES 128	M00056664B:G06
ES 100	M00006704C:G06	ES 128	M00056664C:B07
ES 100	M00006705B:A09	ES 128	M00056665B:A11
ES 100	M00006705C:G09	ES 128	M00056665C:E05
ES 100	M00006712C:F02	ES 128	M00056666A:C08
ES 100	M00006719A:E12	ES 128	M00056669B:G07
ES 100	M00006719A:H07	ES 128	M00056670A:A11
ES 100	M00006731B:B02	ES 128	M00056673D:E06
ES 100	M00006731B:C08	ES 128	M00056674B:E05
ES 100	M00006731B:D03	ES 128	M00056674D:H04
ES 100	M00006731C:E01	ES 128	M00056682D:F10
ES 100	M00006734C:A08	ES 128	M00056683C:B09
ES 100	M00006737D:A11	ES 128	M00056684D:A05
ES 100	M00006740B:G01	ES 128	M00056684D:F11
ES 100	M00006745C:A02	ES 128	M00056688B:F05

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 100	M00006745D:D02	ES 128	M00056690C:F09
ES 101	M00006746C:B06	ES 128	M00056693C:C08
ES 101	M00006746C:B06	ES 128	M00056695A:H09
ES 101	M00006755D:A04	ES 128	M00056697C:E03
ES 101	M00006756B:F08	ES 128	M00056698C:E12
ES 101	M00006761C:C05	ES 128	M00056701B:E08
ES 101	M00006761C:D09	ES 128	M00056703A:D06
ES 101	M00006783B:F07	ES 128	M00056705D:E07
ES 101	M00006789D:A11	ES 128	M00056707B:E02
ES 101	M00006795D:A03	ES 128	M00056707D:D05
ES 101	M00006795D:D07	ES 128	M00056708C:C06
ES 101	M00006803A:C07	ES 128	M00056708D:D11
ES 101	M00006806B:C09	ES 128	M00056709A:A05
ES 101	M00006807A:G12	ES 128	M00056710A:C01
ES 101	M00006810A:D11	ES 128	M00056710B:F05
ES 101	M00006811D:D12	ES 128	M00056710B:H09
ES 101	M00006819B:B05	ES 128	M00056710D:F07
ES 101	M00006821D:B01	ES 128	M00056711A:C01
ES 101	M00006822C:A09	ES 128	M00056711A:F05
ES 101	M00006822D:E09	ES 128	M00056711A:F05
ES 101	M00006831D:H05	ES 128	M00056711D:A05
ES 101	M00006846A:D03	ES 128	M00056712C:A07
ES 101	M00006852A:C07	ES 128	M00056712C:B06
ES 101	M00006859B:D04	ES 128	M00056713D:G08
ES 101	M00006861B:A08	ES 128	M00056714C:H06
ES 101	M00006867C:F12	ES 128	M00056715A:D10
ES 101	M00006871D:F01	ES 128	M00056715A:E04
ES 101	M00006873C:E12	ES 129	M00056715A:G01
ES 101	M00006873D:B01	ES 129	M00056715B:C01
ES 101	M00006885C:G11	ES 129	M00056715D:C04
ES 101	M00006888A:G05	ES 129	M00056715D:E08
ES 101	M00006892B:F09	ES 129	M00056717B:C04
ES 101	M00006894D:A03	ES 129	M00056718C:B01
ES 101	M00006917B:A05	ES 129	M00056718C:G02
ES 101	M00006917C:A04	ES 129	M00056719A:D06
ES 101	M00006917D:D08	ES 129	M00056719A:F12
ES 101	M00006921A:H08	ES 129	M00056719B:A09
ES 101	M00006923B:H05	ES 129	M00056721A:F07
ES 101	M00006928A:A04	ES 129	M00056722A:G01
ES 101	M00006928B:D01	ES 129	M00056723B:D10
ES 101	M00006928B:D01	ES 129	M00056723C:C11
ES 101	M00006937D:F03	ES 129	M00056724D:E11
ES 101	M00006964A:A11	ES 129	M00056726C:G05
ES 101	M00006967B:B05	ES 129	M00056728A:H05
ES 101	M00006976B:D05	ES 129	M00056728B:D05

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 101	M00006979D:B10	ES 129	M00056729B:D04
ES 101	M00006987A:G11	ES 129	M00056729C:H12
ES 101	M00006989C:E04	ES 129	M00056733C:D09
ES 101	M00006990D:E02	ES 129	M00056735D:B08
ES 102	M00006996C:F10	ES 129	M00056737B:G07
ES 102	M00006997A:A03	ES 129	M00056739A:D11
ES 102	M00007006B:A01	ES 129	M00056739B:D08
ES 102	M00007007B:H05	ES 129	M00056740C:B05
ES 102	M00007028C:C04	ES 129	M00056741B:C06
ES 102	M00007028C:C04	ES 129	M00056746D:A02
ES 102	M00007032C:F09	ES 129	M00056746D:D06
ES 102	M00007034B:B06	ES 129	M00056747A:D05
ES 102	M00007035C:E06	ES 129	M00056752A:E01
ES 102	M00007065C:F11	ES 129	M00056753D:A10
ES 102	M00007084B:G04	ES 129	M00056754A:A04
ES 102	M00007092D:F03	ES 129	M00056754B:D09
ES 102	M00007096A:E02	ES 129	M00056754B:H04
ES 102	M00007096C:E01	ES 129	M00056754D:A05
ES 102	M00007096D:H02	ES 129	M00056756B:A05
ES 102	M00007097A:B04	ES 129	M00056756D:B08
ES 102	M00007097D:D07	ES 129	M00056757B:F03
ES 102	M00007098A:C05	ES 129	M00056758B:C05
ES 102	M00007105D:C12	ES 129	M00056759A:F11
ES 102	M00007108A:D01	ES 129	M00056759B:G03
ES 102	M00007110C:F03	ES 129	M00056760D:A04
ES 102	M00007112A:A12	ES 129	M00056761A:F05
ES 102	M00007117D:H03	ES 129	M00056762C:E05
ES 102	M00007121C:G08	ES 129	M00056763C:D05
ES 102	M00007128B:G06	ES 129	M00056764A:E08
ES 102	M00007129A:F08	ES 129	M00056765A:A10
ES 102	M00007131C:A01	ES 130	M00056765C:E12
ES 102	M00007135D:B11	ES 130	M00056765D:D10
ES 102	M00007135D:B11	ES 130	M00056766B:A10
ES 102	M00007136C:C05	ES 130	M00056771C:F12
ES 102	M00007146D:F11	ES 130	M00056771D:C12
ES 102	M00007151A:B11	ES 130	M00056772D:A04
ES 102	M00007156A:E06	ES 130	M00056772D:A04
ES 102	M00007156D:F08	ES 130	M00056772D:E08
ES 102	M00007166A:E06	ES 130	M00056773A:H11
ES 102	M00007172B:C03	ES 130	M00056774B:A02
ES 102	M00007174C:D06	ES 130	M00056775D:A07
ES 102	M00007177A:E11	ES 130	M00056775D:C01
ES 102	M00007178C:D03	ES 130	M00056775D:C08
ES 102	M00007192A:E06	ES 130	M00056776D:A06
ES 102	M00007194A:E06	ES 130	M00056776D:D09

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 102	M00007194B:B04	ES 130	M00056777B:C03
ES 102	M00007204C:G12	ES 130	M00056777D:B02
ES 102	M00007204D:D01	ES 130	M00056777D:F07
ES 102	M00008014A:B01	ES 130	M00056779A:E12
ES 102	M00008015D:B10	ES 130	M00056779D:H10
ES 102	M00008015D:F08	ES 130	M00056779D:H10
ES 102	M00008020C:C03	ES 130	M00056780D:C02
ES 103	M00008023B:D12	ES 130	M00056780D:F09
ES 103	M00008043B:B11	ES 130	M00056781C:E12
ES 103	M00008059D:B08	ES 130	M00056782D:B06
ES 103	M00008065A:B05	ES 130	M00056783B:G11
ES 103	M00008065C:F02	ES 130	M00056784A:B05
ES 103	M00008075C:A12	ES 130	M00056785B:F08
ES 103	M00008076C:F02	ES 130	M00056789A:C04
ES 103	M00008079C:C03	ES 130	M00056789D:E10
ES 103	M00008085B:C09	ES 130	M00056791D:F12
ES 103	M00008089A:E09	ES 130	M00056793C:H07
ES 103	M00008098D:H01	ES 130	M00056796A:H05
ES 103	M00008099B:G08	ES 130	M00056799B:E11
ES 103	M00021620B:F10	ES 130	M00056802B:H01
ES 103	M00021626C:C04	ES 130	M00056802B:H01
ES 103	M00021626D:F04	ES 130	M00056804B:E06
ES 103	M00021628B:B11	ES 130	M00056805D:B09
ES 103	M00021628B:D07	ES 130	M00056808B:B12
ES 103	M00021649A:E12	ES 130	M00056811A:C04
ES 103	M00021654A:A04	ES 130	M00056812C:E08
ES 103	M00021654A:A04	ES 130	M00056815A:B01
ES 103	M00021655C:H02	ES 130	M00056816B:A10
ES 103	M00021670D:G05	ES 130	M00056817C:C03
ES 103	M00021681D:C02	ES 130	M00056821D:C09
ES 103	M00021681D:C02	ES 130	M00056822C:G11
ES 103	M00022189A:B03	ES 130	M00056823A:B05
ES 103	M00022216D:D06	ES 130	M00056823C:A07
ES 103	M00022221A:D06	ES 131	M00056824B:C10
ES 103	M00022221D:D06	ES 131	M00056824D:E01
ES 103	M00022231D:E12	ES 131	M00056826A:B12
ES 103	M00022234B:D05	ES 131	M00056830C:G02
ES 103	M00022235C:C11	ES 131	M00056833C:C01
ES 103	M00022236A:A02	ES 131	M00056839A:G01
ES 103	M00022246A:H08	ES 131	M00056839A:G02
ES 103	M00022251C:A09	ES 131	M00056839C:F01
ES 103	M00022253A:E03	ES 131	M00056840D:H09
ES 103	M00022259C:B07	ES 131	M00056841D:G09
ES 103	M00022273B:A09	ES 131	M00056842B:F12
ES 103	M00022279B:H04	ES 131	M00056842B:F12

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 103	M00022280A:G11	ES 131	M00056843B:H09
ES 103	M00022370A:G02	ES 131	M00056844A:E07
ES 103	M00022411D:G12	ES 131	M00056844C:A10
ES 103	M00022415C:B06	ES 131	M00056848B:C07
ES 103	M00022420B:H03	ES 131	M00056850B:E11
ES 103	M00022430B:D10	ES 131	M00056850B:E11
ES 103	M00022430C:D04	ES 131	M00056857B:C09
ES 103	M00022440D:D01	ES 131	M00056858A:B03
ES 103	M00022444A:C11	ES 131	M00056858B:A12
ES 103	M00022452A:B07	ES 131	M00056859A:D12
ES 104	M00022453B:H04	ES 131	M00056860A:F12
ES 104	M00022453B:H04	ES 131	M00056863C:E03
ES 104	M00022457C:G05	ES 131	M00056864B:H09
ES 104	M00022465D:F05	ES 131	M00056866B:E05
ES 104	M00022468A:E12	ES 131	M00056868D:E09
ES 104	M00022468C:E10	ES 131	M00056870A:E10
ES 104	M00022470B:G01	ES 131	M00056872A:A06
ES 104	M00022470B:G01	ES 131	M00056873C:E06
ES 104	M00022472D:E11	ES 131	M00056874B:H06
ES 104	M00022473D:B06	ES 131	M00056874C:D05
ES 104	M00022496D:F04	ES 131	M00056874D:G01
ES 104	M00022508A:C02	ES 131	M00056879A:E05
ES 104	M00022509A:B06	ES 131	M00056879B:H11
ES 104	M00022516B:E09	ES 131	M00056879D:A02
ES 104	M00022517B:E03	ES 131	M00056880D:B04
ES 104	M00022528A:H12	ES 131	M00056883D:A07
ES 104	M00022533C:E06	ES 131	M00056884B:C06
ES 104	M00022537A:C11	ES 131	M00056885C:C06
ES 104	M00022550C:B04	ES 131	M00056886A:C11
ES 104	M00022559D:D09	ES 131	M00056887B:F08
ES 104	M00022561A:A06	ES 131	M00056892C:A01
ES 104	M00022565A:A05	ES 131	M00056893B:H06
ES 104	M00022565A:A05	ES 131	M00056894D:G06
ES 104	M00022569A:A07	ES 131	M00056895B:A07
ES 104	M00022571C:D11	ES 131	M00056896A:F05
ES 104	M00021854C:E07	ES 131	M00056896A:F10
ES 104	M00021864A:E07	ES 132	M00056898D:D04
ES 104	M00021869D:D01	ES 132	M00056901A:A06
ES 104	M00021886D:F06	ES 132	M00056902A:H12
ES 104	M00021911A:H03	ES 132	M00056909B:E11
ES 104	M00021915B:E10	ES 132	M00056909C:D09
ES 104	M00021925C:H10	ES 132	M00056911B:F02
ES 104	M00021947B:C06	ES 132	M00056913B:G10
ES 104	M00022010B:H01	ES 132	M00056914D:B09
ES 104	M00022013D:H05	ES 132	M00056916C:B02

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 104	M00022015D:F11	ES 132	M00056916C:F04
ES 104	M00022015D:F11	ES 132	M00056921A:C07
ES 104	M00022025C:D02	ES 132	M00056923C:E09
ES 104	M00022049C:B07	ES 132	M00056924D:B06
ES 104	M00022050C:D04	ES 132	M00056925D:C07
ES 104	M00022052D:A08	ES 132	M00056939A:F08
ES 104	M00022058D:A01	ES 132	M00056939D:B02
ES 104	M00022060B:F09	ES 132	M00056941D:E02
ES 104	M00022106B:D04	ES 132	M00056945A:B11
ES 104	M00022123A:D05	ES 132	M00056947D:F09
ES 104	M00022129A:E12	ES 132	M00056949C:F06
ES 104	M00022132A:D10	ES 132	M00056951B:F09
ES 104	M00022132C:F04	ES 132	M00056952C:A06
ES 105	M00022137B:G04	ES 132	M00056952D:H04
ES 105	M00022143A:C10	ES 132	M00056953B:A06
ES 105	M00022143A:D01	ES 132	M00056955B:G09
ES 105	M00022143A:D01	ES 132	M00056956B:F01
ES 105	M00022148A:A06	ES 132	M00056960A:C05
ES 105	M00022149C:C01	ES 132	M00056961A:B08
ES 105	M00022149D:C06	ES 132	M00056961C:G12
ES 105	M00022151A:D11	ES 132	M00056964B:A02
ES 105	M00022151A:G05	ES 132	M00056966D:A11
ES 105	M00022163A:C08	ES 132	M00056967A:D02
ES 105	M00022598B:E12	ES 132	M00056967A:E07
ES 105	M00022598C:D05	ES 132	M00056969B:C08
ES 105	M00022617B:C02	ES 132	M00056969D:B01
ES 105	M00022624C:C02	ES 132	M00056972A:F05
ES 105	M00022641A:C10	ES 132	M00056973D:B08
ES 105	M00022641A:E06	ES 132	M00056974C:F04
ES 105	M00022641B:F02	ES 132	M00056976C:F10
ES 105	M00022645D:A05	ES 132	M00056977A:G03
ES 105	M00022645D:C07	ES 132	M00056985B:C05
ES 105	M00022651D:B04	ES 132	M00056986A:F11
ES 105	M00022651D:C01	ES 132	M00056986D:G01
ES 105	M00022655A:D10	ES 132	M00056990C:B09
ES 105	M00022656D:E11	ES 132	M00056990D:C11
ES 105	M00022660A:B04	ES 132	M00056993A:B06
ES 105	M00022667A:C05	ES 132	M00056993D:D03
ES 105	M00022667D:E11	ES 132	M00056994B:F07
ES 105	M00022681D:E06	ES 133	M00056994C:C03
ES 105	M00022697A:D12	ES 133	M00056996D:A12
ES 105	M00022702B:B04	ES 133	M00056997C:H09
ES 105	M00022716C:C06	ES 133	M00056998A:E08
ES 105	M00022716C:C06	ES 133	M00057002D:B05
ES 105	M00022719A:F12	ES 133	M00057002D:B06

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 105	M00022720B:A11	ES 133	M00057003B:B09
ES 105	M00022720C:C09	ES 133	M00057005B:C01
ES 105	M00022724C:D04	ES 133	M00057005C:D03
ES 105	M00022738B:D06	ES 133	M00057007C:B12
ES 105	M00022741B:B11	ES 133	M00057008C:E09
ES 105	M00022745C:C07	ES 133	M00057011A:D03
ES 105	M00022750A:A07	ES 133	M00057013B:D01
ES 105	M00022750A:A07	ES 133	M00057015A:C12
ES 105	M00022791B:F11	ES 133	M00057019C:H02
ES 105	M00022813B:A08	ES 133	M00057023A:H09
ES 105	M00022820D:C06	ES 133	M00057024A:E02
ES 105	M00022823A:D03	ES 133	M00057024A:G05
ES 105	M00022828A:C06	ES 133	M00057024D:H08
ES 105	M00022829A:H06	ES 133	M00057025C:A08
ES 105	M00022829C:H10	ES 133	M00057027C:G06
ES 105	M00022831B:H07	ES 133	M00057028D:D09
ES 106	M00022831C:A09	ES 133	M00057029A:C12
ES 106	M00022831D:C04	ES 133	M00057029D:A06
ES 106	M00022834C:G01	ES 133	M00057033A:F09
ES 106	M00022836A:G03	ES 133	M00057035B:C09
ES 106	M00022853C:C11	ES 133	M00057041D:B11
ES 106	M00022861D:B10	ES 133	M00057044C:F06
ES 106	M00022872A:B05	ES 133	M00057047B:C02
ES 106	M00022876B:B05	ES 133	M00057049A:G06
ES 106	M00022876D:D08	ES 133	M00057049C:H05
ES 106	M00022880C:G09	ES 133	M00057052D:B11
ES 106	M00022892C:G07	ES 133	M00057052D:G09
ES 106	M00022895B:B11	ES 133	M00057055B:G08
ES 106	M00022897D:H03	ES 133	M00057055B:G08
ES 106	M00022898C:F04	ES 133	M00057058C:F09
ES 106	M00022899A:C09	ES 133	M00057059D:F06
ES 106	M00022901D:E11	ES 133	M00057059D:H09
ES 106	M00022901D:E11	ES 133	M00057060B:A12
ES 106	M00022902C:H10	ES 133	M00057061C:D04
ES 106	M00022908B:H03	ES 133	M00057063A:C08
ES 106	M00022911B:G01	ES 133	M00057065C:D04
ES 106	M00022928A:F03	ES 133	M00057066A:A04
ES 106	M00022934D:B03	ES 133	M00057070D:B08
ES 106	M00022956B:B09	ES 133	M00057072B:E02
ES 106	M00022961A:B11	ES 133	M00057073D:A05
ES 106	M00022973A:G07	ES 133	M00057074D:C09
ES 106	M00022973C:G08	ES 133	M00057074D:C09
ES 106	M00022974D:D10	ES 134	M00055909B:G01
ES 106	M00022995C:E02	ES 134	M00055909C:E08
ES 106	M00022997A:C08	ES 134	M00055911B:E06

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 106	M00022998B:C08	ES 134	M00055912C:E10
ES 106	M00023002D:G10	ES 134	M00055912D:C05
ES 106	M00023015A:D10	ES 134	M00055913B:D05
ES 106	M00023015C:D02	ES 134	M00055919A:A06
ES 106	M00023020D:G09	ES 134	M00055921A:E03
ES 106	M00023023C:F03	ES 134	M00055921B:B11
ES 106	M00023029A:E06	ES 134	M00055922A:C02
ES 106	M00023331D:A11	ES 134	M00055924A:H11
ES 106	M00023347D:C12	ES 134	M00055930A:B08
ES 106	M00023377D:C09	ES 134	M00055931A:A03
ES 106	M00023393D:C02	ES 134	M00055931A:C01
ES 106	M00023393D:E12	ES 134	M00055931B:E01
ES 106	M00023399C:C08	ES 134	M00055936B:E07
ES 106	M00023409A:G08	ES 134	M00055937B:C02
ES 106	M00023414B:F03	ES 134	M00055941B:B12
ES 106	M00023428C:D03	ES 134	M00055941B:B12
ES 106	M00023428D:F11	ES 134	M00055945A:H11
ES 106	M00023430B:D10	ES 134	M00055945B:E10
ES 106	M00023518C:A04	ES 134	M00055946D:G07
ES 107	M00023520A:G07	ES 134	M00055951C:C02
ES 107	M00026804D:D03	ES 134	M00055956C:E02
ES 107	M00026805B:B04	ES 134	M00055958D:F02
ES 107	M00026848C:G11	ES 134	M00055959D:A12
ES 107	M00026854A:E07	ES 134	M00055966C:A03
ES 107	M00026856C:C11	ES 134	M00055966C:D06
ES 107	M00026860D:E01	ES 134	M00055971C:E07
ES 107	M00026861D:A09	ES 134	M00055973A:D04
ES 107	M00026865D:G11	ES 134	M00055976B:F01
ES 107	M00026866A:H08	ES 134	M00055979B:B09
ES 107	M00026873B:E11	ES 134	M00055980A:A10
ES 107	M00026873D:B08	ES 134	M00055981D:A07
ES 107	M00026879A:B02	ES 134	M00055984C:C02
ES 107	M00026879C:D10	ES 134	M00055985D:D01
ES 107	M00026890C:D02	ES 134	M00055990C:B05
ES 107	M00026893C:A01	ES 134	M00055992C:E11
ES 107	M00026896D:E10	ES 134	M00056139D:E04
ES 107	M00026899C:G11	ES 134	M00056139D:G01
ES 107	M00026899C:G11	ES 134	M00056140B:H07
ES 107	M00026900B:C02	ES 134	M00056140D:E07
ES 107	M00026902A:G04	ES 134	M00056141A:D05
ES 107	M00026906B:C10	ES 134	M00056141D:B09
ES 107	M00026909A:G03	ES 134	M00056143A:E09
ES 107	M00026917D:H03	ES 134	M00056144B:C09
ES 107	M00026926D:C05	ES 134	M00056145C:B04
ES 107	M00026934D:E09	ES 134	M00056149C:B01

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 107	M00026936D:C12	ES 135	M00056150B:C12
ES 107	M00026937C:B08	ES 135	M00056153C:D01
ES 107	M00026938A:F04	ES 135	M00056156D:A12
ES 107	M00026938A:F04	ES 135	M00056160D:A08
ES 107	M00026949B:H10	ES 135	M00056161D:G04
ES 107	M00026950A:F12	ES 135	M00056162B:F08
ES 107	M00026950D:H01	ES 135	M00056162B:F08
ES 107	M00026951A:G06	ES 135	M00056162D:D06
ES 107	M00026951A:G11	ES 135	M00056162D:E09
ES 107	M00026951A:G11	ES 135	M00056167D:B08
ES 107	M00026951C:D03	ES 135	M00056169A:F06
ES 107	M00026975C:B03	ES 135	M00056171C:H11
ES 107	M00026977A:E09	ES 135	M00056171C:H12
ES 107	M00026984A:D10	ES 135	M00056180B:H09
ES 107	M00026985C:B05	ES 135	M00056184B:D08
ES 107	M00026986B:H10	ES 135	M00056184C:H03
ES 107	M00026993B:H06	ES 135	M00056184D:F01
ES 107	M00026994C:A07	ES 135	M00056185D:A03
ES 107	M00026996D:A06	ES 135	M00056185D:D06
ES 107	M00027000C:F05	ES 135	M00056186C:F02
ES 107	M00027006B:H01	ES 135	M00056190D:G02
ES 107	M00027013D:E10	ES 135	M00056192D:E04
ES 108	M00027014C:G04	ES 135	M00056192D:H02
ES 108	M00027014D:G04	ES 135	M00056195B:C08
ES 108	M00027016D:G06	ES 135	M00056198A:D07
ES 108	M00027021D:H11	ES 135	M00056199D:A09
ES 108	M00027028D:C07	ES 135	M00056201C:H08
ES 108	M00027030C:C08	ES 135	M00056203A:H10
ES 108	M00027034B:D09	ES 135	M00056204B:A04
ES 108	M00027034C:D11	ES 135	M00056205B:D01
ES 108	M00027035D:H09	ES 135	M00056206A:E06
ES 108	M00027039A:F06	ES 136	M00055997C:G11
ES 108	M00027039B:E09	ES 136	M00055999C:G10
ES 108	M00027042C:G11	ES 136	M00055999D:G06
ES 108	M00027046B:E05	ES 136	M00056000A:F12
ES 108	M00027051A:A07	ES 136	M00056000C:D09
ES 108	M00027054B:B03	ES 136	M00056001A:B06
ES 108	M00027076D:F07	ES 136	M00056001A:B07
ES 108	M00027084C:H10	ES 136	M00056001C:E09
ES 108	M00027088D:H06	ES 136	M00056003A:E06
ES 108	M00027090A:E08	ES 136	M00056005B:E05
ES 108	M00027093C:B08	ES 136	M00056005D:C04
ES 108	M00027096A:G07	ES 136	M00056007A:A11
ES 108	M00027097C:G11	ES 136	M00056007C:F06
ES 108	M00027111A:H04	ES 136	M00056016D:D06

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 108	M00027134A:G02	ES 136	M00056018B:G05
ES 108	M00027139D:C06	ES 136	M00056020A:D10
ES 108	M00027140A:C11	ES 136	M00056020D:D07
ES 108	M00027163A:D11	ES 136	M00056028C:F03
ES 108	M00027165C:F11	ES 136	M00056036D:B06
ES 108	M00027168C:H10	ES 136	M00056037C:B02
ES 108	M00027171D:B07	ES 136	M00056038D:F04
ES 108	M00027172A:C03	ES 136	M00056041A:C04
ES 108	M00027173D:D08	ES 136	M00056042A:A01
ES 108	M00027183B:B01	ES 136	M00056045D:H01
ES 108	M00027193C:C05	ES 136	M00056050C:A03
ES 108	M00027194D:A05	ES 136	M00056053A:A09
ES 108	M00027197A:G07	ES 136	M00056053A:D12
ES 108	M00027197B:F07	ES 136	M00056055A:A07
ES 108	M00027203B:H08	ES 136	M00056055B:B01
ES 108	M00027207B:E09	ES 136	M00056055C:D03
ES 108	M00027217A:G03	ES 136	M00056058A:H04
ES 108	M00027220A:B12	ES 136	M00056060B:B10
ES 108	M00027222A:C09	ES 136	M00056061B:F06
ES 108	M00027229D:E06	ES 136	M00056066D:H07
ES 108	M00027231D:A03	ES 136	M00056067B:D08
ES 108	M00027524B:B11	ES 136	M00056074D:G10
ES 108	M00027527A:G04	ES 136	M00056077D:E06
ES 108	M00027532C:C02	ES 136	M00056077D:E12
ES 108	M00027535D:E08	ES 136	M00056077D:E12
ES 109	M00027536D:G12	ES 136	M00056079B:D12
ES 109	M00027543C:B09	ES 136	M00056079B:F07
ES 109	M00027543D:G07	ES 136	M00056079C:C11
ES 109	M00027556D:G10	ES 136	M00056081D:B05
ES 109	M00027561C:C04	ES 136	M00056081D:B09
ES 109	M00027562B:C02	ES 136	M00056082C:F06
ES 109	M00027564A:D03	ES 136	M00056085D:H11
ES 109	M00027571C:C11	ES 136	M00056094A:H07
ES 109	M00027573A:F09	ES 136	M00056098A:H01
ES 109	M00027578B:F05	ES 136	M00056099B:G09
ES 109	M00027578C:E04	ES 136	M00056099B:H11
ES 109	M00027580C:E10	ES 136	M00056099B:H11
ES 109	M00027581B:E01	ES 136	M00056103A:D12
ES 109	M00027588A:C01	ES 136	M00056103C:H12
ES 109	M00027588C:A06	ES 136	M00056107B:E06
ES 109	M00027594B:C03	ES 136	M00056108D:B12
ES 109	M00027604A:G10	ES 136	M00056108D:B12
ES 109	M00027604A:G10	ES 136	M00056110C:D09
ES 109	M00027605C:E05	ES 136	M00056111D:H02
ES 109	M00027607A:H05	ES 136	M00056112A:H02

Table 8 ES No.	Clone Name	ES No.	Clone Name
ES 109	M00027608C:H07	ES 136	M00056114C:C06
ES 109	M00027616C:G12	ES 136	M00056125B:D09
ES 109	M00027628C:A01	ES 136	M00056128C:B10
ES 109	M00027639B:E11	ES 136	M00056131B:C12
ES 109	M00027641B:A01	ES 136	M00056133D:D09
ES 109	M00027652B:G03	ES 136	M00056136A:B11

Table 9

Table 9 PatientID	Path Report ID	Anatomical Loc	Primary Tumor Size	Primary Tumor Grade	Histopath Grade	Local Invasion	Lymphnode Met	Incidence Lymphnode Met	Regional Lymph node	Distant Met & Loc	Descrip Distant Met	Dist Met Grade	Comment
15	21	Ascending colon	4.0	T3	G2	extending into subserosal adipose tissue	positive	3/8	N1	negative		MX	invasive adenocarcinoma, moderately differentiated; focal perineural invasion is seen
52	71	Ascending colon	9.0	T3	G3	Invasion through muscularis propria, subserosal	negative	0/12	N0	negative		M0	Hyperplastic polyp in appendix.
121	140	Sigmoid	6	T4	G2	Invasion of muscularis propria into serosa, involving	negative	0/34	N0	negative		M0	Perineural invasion; donut anastomosis negative. One tubulovillous and one
125	144	Cecum	6	T3	G2	submucosa of Invasion through the muscularis propria into suserosal adipose tissue. Ileocecal junction.	negative	0/19	N0	negative		M0	patient history of metastatic melanoma
128	147	Transverse colon	5.0	T3	G2	Invasion of muscularis propria into pericolonic fat	positive	1/5	N1	negative		M0	
130	149	Splenic flexure	5.5	T3		through wall and into surrounding adipose tissue	positive	10/24	N2	negative		M1	

Table 9

Table 9 PatientID	Path Report ID	Anatomical Loc	Primary Tumor Size	Primary Tumor Grade	Histopath Grade	Local Invasion	Lymphnode Met	Incidence Lymphnode Met	Regional Lymph node	Distant Met & Loc	Descrip Distant Met	Dist Met Grade	Comment
133	152	Rectum	5.0	T3	G2	Invasion through muscularis propria into non-peritonealized pericolic tissue; gross configuration is annular.	negative	0/9	N0	negative		M0	Small separate tubular adenoma (0.4 cm)
141	160	Cecum	5.5	T3	G2	Invasion of muscularis propria into pericolonic adipose tissue, but not through serosa. Arising from tubular adenoma.	positive	7/21	N2	positive (Liver)	adenocarcinoma consistant with primary	M1	Perineural invasion identified adjacent to metastatic adenocarcinoma.
156	175	Hepatic flexure	3.8	T3	G2	Invasion through mucsularis propria into subserosa/pericolic adipose, no serosal involvement. Gross configuration annular.	positive	2/13	N1	negative		M0	Separate tubolovillous and tubular adenomas

Table 9

Table 9 PatientID	Path Report ID	Anatomical Loc	Primary Tumor Size	Primary Tumor Grade	Histopath Grade	Local Invasion	Lymphnode Met	Incidence Lymphnode Met	Regional Lymph node	Distant Met & Loc	Descrip Distant Met	Dist Met Grade	Comment
228	247	Rectum	5.8	T3	G2 to G3	Invasion through muscularis propria to involve subserosal, perirectoal adipose, and serosa	positive	1/8	N1	negative		MX	Hyperplastic polyps
264	283	Ascending colon	5.5	T3	G2	Invasion through muscularis propria into subserosal adipose tissue.	negative	0/10	N0	negative		M0	Tubulovillous adenoma with high grade dysplasia
266	285	Transverse colon	9	T3	G2	Invades through muscularis propria to involve pericolonic adipose, extends to serosa.	negative	0/15	N1	positive (Mesenteric deposit)	0.4 cm, may represent lymph node completely replaced by tumor	MX	
268	287	Cecum	6.5	T2	G2	Invades full thickness of muscularis propria, but mesenteric adipose free of malignancy	negative	0/12	N0	negative		M0	
278	297	Rectum	4	T3	G2	Invasion into perirectal adipose tissue.	positive	7/10	N2	negative		M0	Descending colon polyps, no HGD or carcinoma identified..

Table 9

Table 9 PatientID	Path Report ID	Anatomical Loc	Primary Tumor Size	Primary Tumor Grade	Histopath Grade	Local Invasion	Lymphnode Met	Incidence Lymphnode Met	Regional Lymph node	Distant Met & Loc	Descrip Distant Met	Dist Met Grade	Comment
295	314	Ascending colon	5.0	T3	G2	Invasion through muscularis propria into percolic adipose tissue.	negative	0/12	N0	negative		M0	Melanosis coli and diverticular disease.
339	358	Rectosigmoid	6	T3	G2	Extends into perirectal fat but does not reach serosa	negative	0/6	N0	negative		M0	1 hyperplastic polyp identified
341	360	Ascending colon	2 cm invasive	T3	G2	Invasion through muscularis propria to involve pericolonic fat. Arising from villous adenoma.	negative	0/4	N0	negative		MX	
356	375	Sigmoid	6.5	T3	G2	Through colon wall into subserosal adipose tissue. No serosal spread seen.	negative	0/4	N0	negative		M0	
360	412	Ascending colon	4.3	T3	G2	Invasion thru muscularis propria to pericolonic fat	positive	1/5	N1	negative		M0	Two mucosal polyps
392	444	Ascending colon	2	T3	G2	Invasion through muscularis propria into subserosal adipose tissue, not serosa.	positive	1/6	N1	positive (Liver)	Macrovesicular and microvesicular steatosis	M1	Tumor arising at prior ileocolic surgical anastomosis.

Table 9

Table 9 PatientID	Path Report ID	Anatomical Loc	Primary Tumor Size	Primary Tumor Grade	Histopath Grade	Local Invasion	Lymphnode Met	Incidence Lymphnode Met	Regional Lymph node	Distant Met & Loc	Descrip Distant Met	Dist Met Grade	Comment
393	445	Cecum	6.0	T3	G2	Cecum, invades through muscularis propria to involve subserosal adipose tissue but not serosa.	negative	0/21	N0	negative		M0	
413	465	Ascending colon	4.8	T3	G2	Invasive through muscularis to involve periserosal fat; abutting ileocecal junction.	negative	0/7	N0	positive (Liver)	adenocarcinoma in multiple slides	M1	rediagnosis of oophorectomy path to metastatic colon cancer.
505	383		7.5 cm max dim	T3	G2	Invasion through muscularis propria involving pericolic adipose, serosal surface uninvolved	positive	2/17	N1	positive (Liver)	moderately differentiated adenocarcinoma, consistant with primary	M1	Anatomical location of primary not notated in report. Evidence of chronic colitis.
517	395	Sigmoid	3	T3	G2	penetrates muscularis propria, involves pericolonic fat.	positive	6/6	N2	negative		M0	No mention of distant met in report

Table 9

Table 9 PatientID	Path Report ID	Anatomical Loc	Primary Tumor Size	Primary Tumor Grade	Histopath Grade	Local Invasion	Lymphnode Met	Incidence Lymphnode Met	Regional Lymph node	Distant Met & Loc	Descrip Distant Met	Dist Met Grade	Comment
534	553	Ascending colon	12	T3	G3	Invasion through the muscularis propria involving pericolic fat. Serosa free of tumor.	negative	0/8	N0	negative		M0	Omentum with fibrosis and fat necrosis. Small bowel with acute and chronic serositis, focal abscess and adhesions.
546	565	Ascending colon	5.5	T3	G2	Invasion through muscularis propria extensively through submucosal and extending to serosa.	positive	6/12	N2	positive (Liver)	metastatic adenocarcinoma	M1	
577	596	Cecum	11.5	T3	G2	Invasion through the bowel wall, into suberosal adipose. Serosal surface free of tumor.	negative	0/58	N0	negative		M0	Appendix dilated and fibrotic, but not involved by tumor

Table 9

Table 9 PatientID	Path Report ID	Anatomical Loc	Primary Tumor Size	Primary Tumor Grade	Histopath Grade	Local Invasion	Lymphnode Met	Incidence Lymphnode Met	Regional Lymph node	Distant Met & Loc	Descrip Distant Met	Dist Met Grade	Comment
695	714	Cecum	14	T3	G2	extending through bowel wall into serosal fat	negative	0/22	N0	negative		MX	tubular adenoma and hyperplstic polyps present, moderately differentiated adenoma with mucinous diferentiation (% not stated)
784	803	Ascending colon	3.5	T3	G3	through muscularis propria into pericolic soft tissues	positive	5/17	N2	positive (Liver)		M1	invasive poorly differentiated adenosquamous carcinoma
786	805	Descending colon	9.5	T3	G2	through muscularis propria into pericolic fat, but not at serosal surface	negative	0/12	N0	positive (Liver)		M1	moderately differentiated invasive adenocarcinoma
791	810	Ascending colon	5.8	T3	G3	through the muscularis propria into pericolic fat	positive	13/25	N2	positive (Liver)		M1	poorly differentiated invasive colonic adenocarcinoma

Table 9

Table 9 PatientID	Path Report ID	Anatomical Loc	Primary Tumor Size	Primary Tumor Grade	Histopath Grade	Local Invasion	Lymphnode Met	Incidence Lymphnode Met	Regional Lymph node	Distant Met & Loc	Descrip Distant Met	Dist Met Grade	Comment
888	908	Ascending colon	2.0	T2	G1	into muscularis propria	positive	3/21	N0	positive (Liver)		M1	well- to moderately-differentiated adenocarcinoma; this patient has tumors of the ascending colon and the sigmoid colon
889	909	Cecum	4.8	T3	G2	through muscularis propria int	positive	1/4	N1	positive (Liver)		M1	moderately differentiated adenocarcinom

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Table 10

SEQ ID NO	%Pts >=2x T/N	% Pts >=2_5x T/N	% Pts >=5x T/N	P15	P52	P121	P125
18	30.3	15.2	3.0	1.855	2.705	1.000	2.280
22	45.5	39.4	18.2	2.196	1.719	0.604	2.388
127	27.3	18.2	6.1	1.000	1.620	1.822	1.692
139	21.2	18.2	15.2	1000.000	0.001	2.345	1.000
148	27.3	18.2	6.1	1.000	1.620	1.822	1.692
155	45.5	12.1	3.0	1.870	3.104	1.361	2.388
246	42.4	9.1	0.0	2.211	2.347	1.000	1.493
272	48.5	27.3	12.1	1.735	3.110	1.379	2.277
273	21.2	18.2	18.2	1.000	1.000	0.330	1.349
279	24.2	12.1	0.0	1.614	2.348	1.498	1.916
298	21.2	18.2	18.2	1.000	1.000	0.330	1.349
329	21.2	9.1	6.1	1.000	1.000	2.211	1.182
353	45.5	12.1	3.0	1.870	3.104	1.361	2.388
354	48.5	30.3	3.0	1.000	1.592	2.248	2.315
381	27.3	18.2	6.1	1.000	1.620	1.822	1.692
389	21.2	9.1	6.1	1.000	1.000	2.211	1.182
405	21.2	9.1	3.0	1.000	2.366	1.546	1.562
406	21.2	9.1	3.0	1.000	2.366	1.546	1.562
412	36.4	18.2	0.0	2.584	1.332	1.952	1.641
421	51.5	24.2	3.0	2.481	2.253	2.234	1.431
465	21.2	18.2	15.2	1000.000	0.001	2.345	1.000
534	21.2	9.1	3.0	1.000	2.366	1.546	1.562
538	42.4	15.2	0.0	1.489	2.019	3.022	1.121
565	45.5	12.1	3.0	1.870	3.104	1.361	2.388
657	45.5	30.3	3.0	1.512	2.748	0.784	2.162
670	24.2	6.1	0.0	1.190	1.000	0.656	1.456
739	21.2	12.1	0.0	1.936	1.830	0.831	1.347
741	48.5	18.2	0.0	2.750	2.458	1.485	1.151
744	48.5	21.2	0.0	2.069	3.002	1.229	1.631
755	30.3	18.2	3.0	1.000	1.414	1.236	1.738
757	21.2	15.2	6.1	1.000	0.839	2.032	2.557
810	30.3	18.2	3.0	1.000	1.414	1.236	1.738
811	30.3	18.2	3.0	1.000	1.414	1.236	1.738
845	30.3	15.2	9.1	1.000	0.271	0.860	1.310
861	24.2	21.2	15.2	1000.000	1000.000	1.000	1.320
915	30.3	15.2	3.0	1.855	2.705	1.000	2.280
954	24.2	21.2	15.2	1000.000	1000.000	1.000	1.320
955	39.4	21.2	3.0	1.612	2.281	0.785	2.045
991	39.4	21.2	3.0	1.612	2.281	0.785	2.045
1035	24.2	6.1	0.0	1.190	1.000	0.656	1.456
1049	21.2	12.1	0.0	1.936	1.830	0.831	1.347
1050	39.4	21.2	3.0	1.612	2.281	0.785	2.045
1235	45.5	12.1	3.0	1.870	3.104	1.361	2.388
1292	21.2	3.0	0.0	1.558	2.014	2.250	1.643

Table 10

SEQ ID NO	%Pts >=2x T/N	% Pts >=2_5x T/N	% Pts >=5x T/N	P15	P52	P121	P125
1313	24.2	6.1	0.0	1.190	1.000	0.656	1.456
1331	27.3	9.1	3.0	1.327	3.749	1.000	2.045
1334	48.5	30.3	3.0	1.000	1.592	2.248	2.315
1418	30.3	15.2	3.0	1.855	2.705	1.000	2.280
1419	45.5	12.1	3.0	1.870	3.104	1.361	2.388
1420	39.4	18.2	3.0	1.759	1.566	1.000	2.302
1477	39.4	18.2	3.0	1.759	1.566	1.000	2.302
1554	33.3	15.2	0.0	1.829	1.622	1.882	1.957
1579	42.4	9.1	0.0	2.211	2.347	1.000	1.493
1600	45.5	12.1	3.0	1.870	3.104	1.361	2.388
1639	48.5	27.3	12.1	1.735	3.110	1.379	2.277
1657	42.4	24.2	0.0	1.000	1.908	2.267	1.188
1679	33.3	15.2	0.0	1.829	1.622	1.882	1.957
1744	42.4	15.2	3.0	2.059	2.753	1.679	1.587
1847	78.8	63.6	9.1	2.625	4.493	1.642	2.743
1877	45.5	12.1	3.0	1.870	3.104	1.361	2.388
1880	66.7	48.5	6.1	1.000	4.075	1.754	2.436
1889	45.5	12.1	3.0	1.870	3.104	1.361	2.388
2009	30.3	15.2	3.0	1.855	2.705	1.000	2.280
2023	30.3	18.2	0.0	1.285	2.400	0.767	1.270
2029	42.4	9.1	0.0	2.211	2.347	1.000	1.493
2071	24.2	6.1	0.0	1.190	1.000	0.656	1.456
2077	24.2	6.1	0.0	1.190	1.000	0.656	1.456
2103	27.3	21.2	0.0	3.505	0.793	0.809	1.348
2109	24.2	6.1	0.0	1.190	1.000	0.656	1.456
2138	33.3	21.2	9.1	1.000	0.296	3.016	0.794
2143	60.6	48.5	12.1	6.263	1.000	1.832	1.937
2183	63.6	45.5	12.1	1.945	2.010	0.547	3.325
2185	30.3	18.2	3.0	1.000	1.414	1.236	1.738
2190	24.2	6.1	0.0	1.190	1.000	0.656	1.456
2200	45.5	12.1	3.0	1.870	3.104	1.361	2.388
2206	60.6	27.3	3.0	2.256	2.228	1.673	1.937
2220	33.3	24.2	3.0	2.591	0.483	2.580	1.440
2224	48.5	36.4	3.0	1.602	3.209	1.000	2.942
2249	45.5	12.1	3.0	1.870	3.104	1.361	2.388
2255	24.2	3.0	0.0	1.985	2.261	1.000	0.904
2265	54.5	42.4	6.1	1.886	1.000	1.503	3.375
2267	84.8	57.6	18.2	2.529	3.042	2.471	1.669
2281	54.5	36.4	3.0	2.008	0.686	3.104	1.362
2294	30.3	15.2	3.0	1.855	2.705	1.000	2.280
2300	30.3	15.2	3.0	1.855	2.705	1.000	2.280
2307	42.4	9.1	0.0	2.211	2.347	1.000	1.493
2309	42.4	21.2	9.1	2.497	1.837	3.249	1.497
2313	57.6	48.5	9.1	2.603	2.642	1.000	1.939

Table 10

SEQ ID NO	%Pts >=2x T/N	% Pts >=2_5x T/N	% Pts >=5x T/N	P15	P52	P121	P125
2314	48.5	27.3	12.1	1.735	3.110	1.379	2.277
2316	42.4	9.1	0.0	2.211	2.347	1.000	1.493
2327	39.4	24.2	3.0	2.006	1.692	1.778	1.662
2348	72.7	45.5	0.0	2.961	3.152	2.712	1.346

Table 11

SEQ ID NO	P128	P130	P133	P141	P156	P228	P264	P266
18	0.713	1.800	1.955	0.663	0.466	1.457	2.262	1.236
22	1.594	6.800	1.340	1.131	1.000	2.647	1.628	1.190
127	3.761	1.000	1.000	1.587	2.127	1.000	1.000	1.000
139	1000.000	1.000	1000.000	0.482	2.846	0.767	1.631	1.000
148	3.761	1.000	1.000	1.587	2.127	1.000	1.000	1.000
155	2.062	1.781	2.302	1.000	1.000	1.306	2.099	1.357
246	1.779	1.337	2.865	1.515	1.617	1.301	2.098	1.733
272	2.044	2.219	4.257	0.744	1.000	1.127	1.588	1.634
273	1000.000	1000.000	1.000	1.000	0.566	1.554	1.000	1.000
279	1.202	1.852	2.370	1.000	1.000	1.114	1.399	1.239
298	1000.000	1000.000	1.000	1.000	0.566	1.554	1.000	1.000
329	3.234	0.001	1.000	8.480	2.077	1.000	0.001	1.445
353	2.062	1.781	2.302	1.000	1.000	1.306	2.099	1.357
354	1.664	1.987	2.307	2.728	1.000	1.239	1.469	2.059
381	3.761	1.000	1.000	1.587	2.127	1.000	1.000	1.000
389	3.234	0.001	1.000	8.480	2.077	1.000	0.001	1.445
405	1.531	1.553	1.854	2.044	1.363	1.786	1.877	1.644
406	1.531	1.553	1.854	2.044	1.363	1.786	1.877	1.644
412	1.831	1.503	2.326	1.130	1.773	1.379	2.318	2.019
421	2.209	1.889	3.114	1.776	1.788	1.879	2.666	2.257
465	1000.000	1.000	1000.000	0.482	2.846	0.767	1.631	1.000
534	1.531	1.553	1.854	2.044	1.363	1.786	1.877	1.644
538	1.559	1.000	1.740	3.133	2.186	1.869	2.023	2.483
565	2.062	1.781	2.302	1.000	1.000	1.306	2.099	1.357
657	1.524	1.770	2.846	1.185	1.000	1.460	1.831	2.261
670	1.182	1.636	1.418	1.298	1.000	1.000	1.127	0.774
739	0.845	1.286	1.872	1.000	1.000	1.295	1.722	1.785
741	1.819	1.801	3.227	1.457	2.960	1.388	2.086	2.410
744	2.515	1.605	2.399	1.803	2.524	1.551	2.284	1.574
755	1.000	0.754	2.234	3.723	1.000	1.285	1.771	2.246
757	0.745	1.332	1000.000	1.000	1.000	1.781	1.515	1.747
810	1.000	0.754	2.234	3.723	1.000	1.285	1.771	2.246
811	1.000	0.754	2.234	3.723	1.000	1.285	1.771	2.246
845	2.331	1.641	1000.000	1.252	1.000	0.595	1.950	0.616
861	2.888	1.000	0.001	1.000	1.694	0.001	1000.000	1.423
915	0.713	1.800	1.955	0.663	0.466	1.457	2.262	1.236
954	2.888	1.000	0.001	1.000	1.694	0.001	1000.000	1.423
955	1.415	2.042	2.733	0.898	1.431	1.000	1.459	2.009
991	1.415	2.042	2.733	0.898	1.431	1.000	1.459	2.009
1035	1.182	1.636	1.418	1.298	1.000	1.000	1.127	0.774
1049	0.845	1.286	1.872	1.000	1.000	1.295	1.722	1.785
1050	1.415	2.042	2.733	0.898	1.431	1.000	1.459	2.009
1235	2.062	1.781	2.302	1.000	1.000	1.306	2.099	1.357
1292	1.804	1.641	1.876	1.335	0.766	1.245	1.500	1.000

Table 11

SEQ ID NO	P128	P130	P133	P141	P156	P228	P264	P266
1313	1.182	1.636	1.418	1.298	1.000	1.000	1.127	0.774
1331	1.427	1.669	1.837	1.265	1.000	1.667	1.000	1.374
1334	1.664	1.987	2.307	2.728	1.000	1.239	1.469	2.059
1418	0.713	1.800	1.955	0.663	0.466	1.457	2.262	1.236
1419	2.062	1.781	2.302	1.000	1.000	1.306	2.099	1.357
1420	1.518	1.997	2.298	2.273	1.000	1.234	1.186	1.730
1477	1.518	1.997	2.298	2.273	1.000	1.234	1.186	1.730
1554	2.959	1.821	2.234	1.181	1.827	1.000	2.042	1.970
1579	1.779	1.337	2.865	1.515	1.617	1.301	2.098	1.733
1600	2.062	1.781	2.302	1.000	1.000	1.306	2.099	1.357
1639	2.044	2.219	4.257	0.744	1.000	1.127	1.588	1.634
1657	2.160	1.416	1.000	3.531	2.974	1.798	1.899	2.065
1679	2.959	1.821	2.234	1.181	1.827	1.000	2.042	1.970
1744	1.479	1.669	2.442	1.352	1.367	1.605	2.145	2.098
1847	1.839	2.548	2.954	2.234	1.816	1.352	3.390	2.541
1877	2.062	1.781	2.302	1.000	1.000	1.306	2.099	1.357
1880	2.762	2.081	4.111	2.306	2.391	1.675	2.572	3.031
1889	2.062	1.781	2.302	1.000	1.000	1.306	2.099	1.357
2009	0.713	1.800	1.955	0.663	0.466	1.457	2.262	1.236
2023	1.871	1.869	2.588	1.834	1.718	1.197	1.965	2.023
2029	1.779	1.337	2.865	1.515	1.617	1.301	2.098	1.733
2071	1.182	1.636	1.418	1.298	1.000	1.000	1.127	0.774
2077	1.182	1.636	1.418	1.298	1.000	1.000	1.127	0.774
2103	2.297	0.855	1.659	1.607	0.252	1.602	2.866	1.292
2109	1.182	1.636	1.418	1.298	1.000	1.000	1.127	0.774
2138	2.074	1.438	1.552	2.403	0.647	0.605	0.469	0.528
2143	2.828	2.795	2.732	2.548	0.073	1.201	1.722	1.181
2183	1.714	3.061	4.635	1.688	1.230	1.241	1.237	1.852
2185	1.000	0.754	2.234	3.723	1.000	1.285	1.771	2.246
2190	1.182	1.636	1.418	1.298	1.000	1.000	1.127	0.774
2200	2.062	1.781	2.302	1.000	1.000	1.306	2.099	1.357
2206	2.229	2.131	2.194	2.235	2.121	1.388	3.468	2.115
2220	2.650	0.815	1.629	1.586	0.155	1.408	2.830	1.636
2224	1.385	2.044	2.510	0.628	1.763	1.000	1.000	1.687
2249	2.062	1.781	2.302	1.000	1.000	1.306	2.099	1.357
2255	1.454	1.000	1.567	2.350	1.729	2.071	1.439	1.540
2265	2.843	2.931	1.690	1.678	0.724	2.656	2.035	3.526
2267	2.490	1.937	3.729	2.105	2.224	2.547	2.605	4.402
2281	3.412	2.374	1.404	4.761	3.241	2.253	1.384	1.912
2294	0.713	1.800	1.955	0.663	0.466	1.457	2.262	1.236
2300	0.713	1.800	1.955	0.663	0.466	1.457	2.262	1.236
2307	1.779	1.337	2.865	1.515	1.617	1.301	2.098	1.733
2309	1.496	1.483	2.427	1.764	1.000	1.231	1.413	1.000
2313	1.452	1.915	2.252	1.342	2.516	1.278	2.179	4.223

Table 11

SEQ ID NO	P128	P130	P133	P141	P156	P228	P264	P266
2314	2.044	2.219	4.257	0.744	1.000	1.127	1.588	1.634
2316	1.779	1.337	2.865	1.515	1.617	1.301	2.098	1.733
2327	1.778	1.200	2.169	1.462	1.570	1.784	1.937	2.633
2348	2.064	1.288	2.075	2.527	2.239	1.745	3.772	3.393
2384	2.340	0.001	0.001	2.927	4.830	1.708	1.651	1.586

Table 12

SEQ ID NO	P268	P278	P295	P339	P341	P356	P360	P392
18	1.00	2.819	1.000	1.589	1.238	1.784	0.748	2.486
22	1.194	1.000	1.000	1.474	3.006	2.766	1.622	10.061
127	2.953	2.030	8.118	1.000	2.854	1.000	1000.000	0.001
139	1000.00	1.332	1.000	0.344	1.537	1.000	0.001	0.464
148	2.953	2.030	8.118	1.000	2.854	1.000	1000.000	0.001
155	1.187	1.447	1.000	1.484	3.621	3.844	1.995	1.313
246	1.422	2.018	2.385	1.218	2.039	3.486	1.636	1.623
272	1.268	1.563	1.870	2.056	6.240	6.491	2.230	1.427
273	1.000	1000.000	1.000	1.196	2.209	1000.000	0.001	1.000
279	1.000	1.000	1.000	1.737	2.382	3.061	2.679	1.361
298	1.000	1000.000	1.000	1.196	2.209	1000.000	0.001	1.000
329	2.467	2.166	21.707	0.615	1.616	1.000	1.000	1.000
353	1.187	1.447	1.000	1.484	3.621	3.844	1.995	1.313
354	2.359	1.552	2.918	1.647	4.706	3.623	1.979	1.677
381	2.953	2.030	8.118	1.000	2.854	1.000	1000.000	0.001
389	2.467	2.166	21.707	0.615	1.616	1.000	1.000	1.000
405	1.221	1.796	1.995	1.780	1.726	2.970	1.792	1.581
406	1.221	1.796	1.995	1.780	1.726	2.970	1.792	1.581
412	2.677	2.809	2.969	1.373	2.087	3.804	1.612	1.163
421	2.468	5.262	4.008	1.487	4.366	2.078	1.781	1.332
465	1000.00	1.332	1.000	0.344	1.537	1.000	0.001	0.464
534	1.221	1.796	1.995	1.780	1.726	2.970	1.792	1.581
538	2.565	1.856	1.000	1.000	2.449	1.000	2.097	2.647
565	1.187	1.447	1.000	1.484	3.621	3.844	1.995	1.313
657	1.369	1.000	1.000	1.679	3.084	2.855	2.104	0.927
670	1.677	2.420	2.263	1.314	1.473	2.523	1.776	2.244
739	1.412	1.431	3.103	1.000	2.847	2.621	1.000	1.117
741	2.240	2.040	1.000	1.000	2.450	3.440	2.045	1.998
744	1.837	2.201	2.518	1.604	2.248	2.989	1.570	1.409
755	1.000	1.320	0.556	1.385	1.321	1.000	1.000	6.185
757	0.713	1000.000	0.632	2.389	0.202	1.000	1.000	0.356
810	1.000	1.320	0.556	1.385	1.321	1.000	1.000	6.185
811	1.000	1.320	0.556	1.385	1.321	1.000	1.000	6.185
845	2.151	2.384	2.417	0.573	1.451	2.652	1.000	0.734
861	1.000	1.509	9.879	1000.000	2.327	0.001	1.236	0.870
915	1.000	2.819	1.000	1.589	1.238	1.784	0.748	2.486
954	1.000	1.509	9.879	1000.000	2.327	0.001	1.236	0.870
955	1.657	1.732	3.510	1.652	4.946	4.071	2.194	1.932
991	1.657	1.732	3.510	1.652	4.946	4.071	2.194	1.932
1035	1.677	2.420	2.263	1.314	1.473	2.523	1.776	2.244
1049	1.412	1.431	3.103	1.000	2.847	2.621	1.000	1.117
1050	1.657	1.732	3.510	1.652	4.946	4.071	2.194	1.932
1235	1.187	1.447	1.000	1.484	3.621	3.844	1.995	1.313
1292	0.718	1.000	1.000	1.675	2.301	1.361	2.161	1.825

Table 12

SEQ ID NO	P268	P278	P295	P339	P341	P356	P360	P392
1313	1.677	2.420	2.263	1.314	1.473	2.523	1.776	2.244
1331	0.789	1.609	1.000	0.797	1.000	2.075	2.491	2.505
1334	2.359	1.552	2.918	1.647	4.706	3.623	1.979	1.677
1418	1.000	2.819	1.000	1.589	1.238	1.784	0.748	2.486
1419	1.187	1.447	1.000	1.484	3.621	3.844	1.995	1.313
1420	1.864	1.428	2.631	1.854	3.430	3.182	1.892	1.581
1477	1.864	1.428	2.631	1.854	3.430	3.182	1.892	1.581
1554	2.495	2.090	3.320	1.000	3.907	2.976	1.875	1.000
1579	1.422	2.018	2.385	1.218	2.039	3.486	1.636	1.623
1600	1.187	1.447	1.000	1.484	3.621	3.844	1.995	1.313
1639	1.268	1.563	1.870	2.056	6.240	6.491	2.230	1.427
1657	2.183	2.285	3.554	1.247	2.093	1.840	1.855	1.504
1679	2.495	2.090	3.320	1.000	3.907	2.976	1.875	1.000
1744	2.006	1.696	2.261	1.611	2.154	3.791	1.816	1.356
1847	1.535	2.851	4.154	2.055	6.047	4.103	3.367	2.029
1877	1.187	1.447	1.000	1.484	3.621	3.844	1.995	1.313
1880	2.274	1.266	4.526	2.591	5.409	3.138	2.675	1.391
1889	1.187	1.447	1.000	1.484	3.621	3.844	1.995	1.313
2009	1.000	2.819	1.000	1.589	1.238	1.784	0.748	2.486
2023	1.971	1.699	2.355	1.453	3.122	2.528	1.949	1.326
2029	1.422	2.018	2.385	1.218	2.039	3.486	1.636	1.623
2071	1.677	2.420	2.263	1.314	1.473	2.523	1.776	2.244
2077	1.677	2.420	2.263	1.314	1.473	2.523	1.776	2.244
2103	2.516	0.852	1.775	0.818	4.294	2.281	1.119	0.890
2109	1.677	2.420	2.263	1.314	1.473	2.523	1.776	2.244
2138	1.794	1.486	5.006	0.398	4.768	0.001	2.344	2.434
2143	2.079	1.664	1.000	1.871	2.812	2.693	5.094	1.947
2183	2.325	2.043	2.530	2.411	5.749	5.509	3.490	2.008
2185	1.000	1.320	0.556	1.385	1.321	1.000	1.000	6.185
2190	1.677	2.420	2.263	1.314	1.473	2.523	1.776	2.244
2200	1.187	1.447	1.000	1.484	3.621	3.844	1.995	1.313
2206	1.977	1.676	1.774	1.542	2.538	1.867	2.312	1.000
2220	2.942	0.729	1.772	0.861	15.794	2.349	1.363	0.808
2224	1.457	1.690	2.551	1.860	4.114	3.548	3.125	0.792
2249	1.187	1.447	1.000	1.484	3.621	3.844	1.995	1.313
2255	1.586	1.943	1.000	0.699	1.593	2.039	1.798	0.774
2265	2.157	1.922	3.895	4.143	2.655	1.914	2.159	3.312
2267	3.442	3.933	5.994	1.448	8.695	7.488	2.687	2.449
2281	2.467	1.000	7.584	1.417	3.693	1.947	1.539	4.429
2294	1.000	2.819	1.000	1.589	1.238	1.784	0.748	2.486
2300	1.000	2.819	1.000	1.589	1.238	1.784	0.748	2.486
2307	1.422	2.018	2.385	1.218	2.039	3.486	1.636	1.623
2309	2.485	2.369	1.000	1.820	3.354	5.046	1.820	0.703
2313	3.203	1.593	4.012	1.593	6.374	6.940	3.158	0.947

Table 12

SEQ ID NO	P268	P278	P295	P339	P341	P356	P360	P392
2314	1.268	1.563	1.870	2.056	6.240	6.491	2.230	1.427
2316	1.422	2.018	2.385	1.218	2.039	3.486	1.636	1.623
2327	2.439	1.482	2.156	1.390	3.500	3.654	1.655	0.771
2348	2.448	2.617	4.003	1.289	2.940	3.894	2.277	1.202
2384	2.328	1.359	9.253	0.383	1.835	0.001	1.000	0.714

Table 13

SEQ ID NO	P393	P413	P505	P517	P534	P546	P577	P695
18	1.058	2.471	1.583	1.726	0.506	1.431	2.632	5.930
22	14.260	2.516	1.498	3.747	1.300	5.779	11.202	0.001
127	1.000	0.001	1.000	1.000	0.001	1.000	3.303	1.000
139	1.000	1.000	0.458	1.249	0.001	1000.000	0.702	1.000
148	1.000	0.001	1.000	1.000	0.001	1.000	3.303	1.000
155	1.137	2.268	2.414	1.382	2.107	2.210	2.384	5.256
246	0.741	2.181	2.494	1.504	1.511	1.831	2.064	4.421
272	1.348	2.222	2.506	1.355	1.670	2.535	1.556	8.411
273	1.000	1.000	1000.000	1.477	1.645	1.000	1.389	1.000
279	0.914	1.603	1.936	1.485	2.430	1.999	1.647	4.375
298	1.000	1.000	1000.000	1.477	1.645	1.000	1.389	1.000
329	1.000	1.000	1.436	0.517	1.000	1.469	1.000	1.000
353	1.137	2.268	2.414	1.382	2.107	2.210	2.384	5.256
354	1.224	3.432	2.806	1.328	2.470	2.592	1.929	6.973
381	1.000	0.001	1.000	1.000	0.001	1.000	3.303	1.000
389	1.000	1.000	1.436	0.517	1.000	1.469	1.000	1.000
405	1.241	1.841	1.470	1.000	1.672	2.218	1.649	7.555
406	1.241	1.841	1.470	1.000	1.672	2.218	1.649	7.555
412	1.258	2.153	1.849	1.445	1.000	1.531	1.637	3.302
421	1.000	1.327	2.871	1.116	1.903	2.200	2.644	0.001
465	1.000	1.000	0.458	1.249	0.001	1000.000	0.702	1.000
534	1.241	1.841	1.470	1.000	1.672	2.218	1.649	7.555
538	1.560	1.982	2.159	1.278	1.425	1.204	3.046	2.068
565	1.137	2.268	2.414	1.382	2.107	2.210	2.384	5.256
657	0.763	1.602	2.797	1.265	2.765	2.236	2.548	5.071
670	1.710	2.337	1.898	0.892	1.347	1.908	1.136	3.404
739	2.102	1.689	4.429	0.830	1.000	1.000	2.108	2.208
741	1.935	1.911	2.812	1.000	1.854	1.793	2.441	0.001
744	1.320	1.404	1.553	1.000	1.957	1.816	2.156	3.745
755	1.219	2.547	1.288	2.539	3.936	3.625	2.363	1.955
757	0.851	0.750	0.815	0.258	0.712	1.229	0.190	1.000
810	1.219	2.547	1.288	2.539	3.936	3.625	2.363	1.955
811	1.219	2.547	1.288	2.539	3.936	3.625	2.363	1.955
845	2.765	1.000	2.202	0.472	0.490	1.417	0.725	0.001
861	1.000	1.000	1.000	1.000	1.000	1.530	0.769	1.000
915	1.058	2.471	1.583	1.726	0.506	1.431	2.632	5.930
954	1.000	1.000	1.000	1.000	1.000	1.530	0.769	1.000
955	1.322	2.608	1.910	1.199	1.635	1.893	1.473	5.842
991	1.322	2.608	1.910	1.199	1.635	1.893	1.473	5.842
1035	1.710	2.337	1.898	0.892	1.347	1.908	1.136	3.404
1049	2.102	1.689	4.429	0.830	1.000	1.000	2.108	2.208
1050	1.322	2.608	1.910	1.199	1.635	1.893	1.473	5.842
1235	1.137	2.268	2.414	1.382	2.107	2.210	2.384	5.256
1292	1.000	1.518	1.980	1.518	2.526	1.588	1.865	2.251
1313	1.710	2.337	1.898	0.892	1.347	1.908	1.136	3.404

Table 13

SEQ ID NO	P393	P413	P505	P517	P534	P546	P577	P695
1331	0.743	2.126	1.613	1.177	2.128	1.000	1.951	6.931
1334	1.224	3.432	2.806	1.328	2.470	2.592	1.929	6.973
1418	1.058	2.471	1.583	1.726	0.506	1.431	2.632	5.930
1419	1.137	2.268	2.414	1.382	2.107	2.210	2.384	5.256
1420	1.205	3.301	2.749	1.256	2.474	2.345	1.826	8.108
1477	1.205	3.301	2.749	1.256	2.474	2.345	1.826	8.108
1554	1.000	1.793	2.719	1.679	1.000	1.549	2.076	0.001
1579	0.741	2.181	2.494	1.504	1.511	1.831	2.064	4.421
1600	1.137	2.268	2.414	1.382	2.107	2.210	2.384	5.256
1639	1.348	2.222	2.506	1.355	1.670	2.535	1.556	8.411
1657	2.809	1.534	1.366	1.197	2.545	1.964	1.506	0.001
1679	1.000	1.793	2.719	1.679	1.000	1.549	2.076	0.001
1744	1.249	2.009	1.832	1.488	1.379	1.975	2.128	13.930
1847	1.781	2.929	2.183	2.759	3.853	3.092	2.051	7.549
1877	1.137	2.268	2.414	1.382	2.107	2.210	2.384	5.256
1880	1.000	3.187	2.564	0.756	1.226	3.841	3.201	16.724
1889	1.137	2.268	2.414	1.382	2.107	2.210	2.384	5.256
2009	1.058	2.471	1.583	1.726	0.506	1.431	2.632	5.930
2023	1.952	1.472	1.917	1.516	2.305	2.677	2.620	2.660
2029	0.741	2.181	2.494	1.504	1.511	1.831	2.064	4.421
2071	1.710	2.337	1.898	0.892	1.347	1.908	1.136	3.404
2077	1.710	2.337	1.898	0.892	1.347	1.908	1.136	3.404
2103	0.537	1.790	0.727	0.750	0.329	1.100	1.239	0.001
2109	1.710	2.337	1.898	0.892	1.347	1.908	1.136	3.404
2138	0.852	1.789	3.765	0.686	3.176	1.591	1.852	0.001
2143	2.044	17.760	4.034	1.988	0.026	3.908	2.394	42.662
2183	1.088	5.833	3.519	1.572	2.641	4.011	1.695	7.783
2185	1.219	2.547	1.288	2.539	3.936	3.625	2.363	1.955
2190	1.710	2.337	1.898	0.892	1.347	1.908	1.136	3.404
2200	1.137	2.268	2.414	1.382	2.107	2.210	2.384	5.256
2206	1.000	3.033	1.912	1.699	2.147	2.780	2.155	2.518
2220	0.337	2.339	0.768	0.563	0.359	1.242	1.492	1.000
2224	1.000	2.266	2.040	1.000	2.747	2.620	1.718	14.145
2249	1.137	2.268	2.414	1.382	2.107	2.210	2.384	5.256
2255	1.243	1.766	1.547	0.843	1.000	1.498	2.122	4.421
2265	5.268	1.518	2.253	3.678	0.766	1.565	1.000	1.853
2267	0.815	2.497	3.234	2.275	2.344	3.596	5.023	12.124
2281	1.128	0.885	1.237	1.434	3.327	3.206	1.355	0.001
2294	1.058	2.471	1.583	1.726	0.506	1.431	2.632	5.930
2300	1.058	2.471	1.583	1.726	0.506	1.431	2.632	5.930
2307	0.741	2.181	2.494	1.504	1.511	1.831	2.064	4.421
2309	1.240	2.239	2.841	1.000	2.270	2.614	0.583	5.244
2313	0.633	2.821	2.976	1.253	1.675	3.657	2.284	8.587
2314	1.348	2.222	2.506	1.355	1.670	2.535	1.556	8.411
2316	0.741	2.181	2.494	1.504	1.511	1.831	2.064	4.421

Table 13

SEQ ID NO	P393	P413	P505	P517	P534	P546	P577	P695
2327	1.000	1.801	1.978	1.000	3.188	1.607	2.276	13.068
2348	0.790	3.524	3.377	2.062	2.123	1.959	1.626	1.000
2384	0.001	1.346	1.831	1.000	1.646	1.944	1.549	1.000

Table 14

SEQID NO	P784	P786	P791	P888	P889
18	1.000	1.000	4.202	1.464	2.147
22	1.000	1.276	14.034	4.139	3.640
127	1.708	2.247	1.000	0.441	0.001
139	1.391	1.857	1.000	0.402	1.000
148	1.708	2.247	1.000	0.441	0.001
155	1.328	1.421	2.456	1.910	2.069
246	1.243	1.679	2.228	2.333	1.774
272	0.819	1.632	2.808	5.465	2.307
273	1000.000	0.758	1.000	1.000	1.000
279	1.000	1.000	1.834	2.776	1.636
298	1000.000	0.758	1.000	1.000	1.000
329	1.000	1.000	1.000	0.642	1.000
353	1.328	1.421	2.456	1.910	2.069
354	1.000	1.416	2.862	2.690	1.645
381	1.708	2.247	1.000	0.441	0.001
389	1.000	1.000	1.000	0.642	1.000
405	1.000	1.821	1.628	2.276	2.501
406	1.000	1.821	1.628	2.276	2.501
412	1.000	1.888	1.915	2.276	1.481
421	3.336	1.677	2.208	1.000	1.976
465	1.391	1.857	1.000	0.402	1.000
534	1.000	1.821	1.628	2.276	2.501
538	1.000	1.629	2.152	1.000	1.792
565	1.328	1.421	2.456	1.910	2.069
657	1.000	1.997	2.083	3.178	3.444
670	1.000	1.780	1.000	2.177	2.258
739	1.356	0.696	1.000	1.000	1.463
741	2.324	1.000	2.379	1.407	2.833
744	2.137	1.934	2.482	2.035	3.980
755	0.796	1.000	1.737	1.000	2.218
757	2.531	3.138	0.395	1.000	1.000
810	0.796	1.000	1.737	1.000	2.218
811	0.796	1.000	1.737	1.000	2.218
845	1000.000	1.984	1000.000	1.374	1.000
861	3.031	1.000	1.000	1.000	1.000
915	1.000	1.000	4.202	1.464	2.147
954	3.031	1.000	1.000	1.000	1.000
955	0.876	1.781	2.424	4.143	1.977
991	0.876	1.781	2.424	4.143	1.977
1035	1.000	1.780	1.000	2.177	2.258
1049	1.356	0.696	1.000	1.000	1.463
1050	0.876	1.781	2.424	4.143	1.977
1235	1.328	1.421	2.456	1.910	2.069
1292	1.000	1.000	1.992	2.144	1.615
1313	1.000	1.780	1.000	2.177	2.258

Table 14

SEQID NO	P784	P786	P791	P888	P889
18	1.000	1.000	4.202	1.464	2.147
1331	1.290	1.000	1.000	1.995	2.203
1334	1.000	1.416	2.862	2.690	1.645
1418	1.000	1.000	4.202	1.464	2.147
1419	1.328	1.421	2.456	1.910	2.069
1420	0.816	1.000	2.196	2.446	1.518
1477	0.816	1.000	2.196	2.446	1.518
1554	1.585	1.889	2.178	1.806	1.867
1579	1.243	1.679	2.228	2.333	1.774
1600	1.328	1.421	2.456	1.910	2.069
1639	0.819	1.632	2.808	5.465	2.307
1657	2.810	2.638	1.976	1.491	2.955
1679	1.585	1.889	2.178	1.806	1.867
1744	1.253	1.994	1.874	3.193	2.663
1847	1.559	2.762	5.043	4.135	3.753
1877	1.328	1.421	2.456	1.910	2.069
1880	1.306	1.940	2.293	3.897	1.624
1889	1.328	1.421	2.456	1.910	2.069
2009	1.000	1.000	4.202	1.464	2.147
2023	1.511	1.357	1.632	1.891	1.895
2029	1.243	1.679	2.228	2.333	1.774
2071	1.000	1.780	1.000	2.177	2.258
2077	1.000	1.780	1.000	2.177	2.258
2103	0.573	2.678	1.000	2.507	3.278
2109	1.000	1.780	1.000	2.177	2.258
2138	7.866	1.000	1000.000	1.719	1.000
2143	2.625	2.744	4.155	2.105	4.438
2183	1.000	2.139	3.014	3.159	3.381
2185	0.796	1.000	1.737	1.000	2.218
2190	1.000	1.780	1.000	2.177	2.258
2200	1.328	1.421	2.456	1.910	2.069
2206	1.489	2.750	2.910	5.049	4.006
2220	0.419	3.014	0.575	2.397	3.558
2224	1.000	1.815	2.513	3.487	2.180
2249	1.328	1.421	2.456	1.910	2.069
2255	1.000	1.493	2.186	1.000	2.222
2265	1.267	3.638	1.623	5.889	3.339
2267	1.746	2.363	5.515	2.674	3.637
2281	2.399	3.587	3.625	2.567	2.417
2294	1.000	1.000	4.202	1.464	2.147
2300	1.000	1.000	4.202	1.464	2.147
2307	1.243	1.679	2.228	2.333	1.774
2309	0.397	1.000	1.472	5.315	2.250
2313	1.000	1.939	2.505	4.525	2.674
2314	0.819	1.632	2.808	5.465	2.307

Table 14

SEQID NO	P784	P786	P791	P888	P889
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2316	1.243	1.679	2.228	2.333	1.774
2327	1.295	1.658	2.836	2.766	2.873
2348	2.167	2.157	3.410	2.828	3.794
2384	1.352	1.000	2.727	0.583	1.000

We claim:

1. An isolated polynucleotide comprising a nucleotide sequence having at least 90% sequence identity to 30 contiguous nucleotides of any of SEQ ID NOS:1-2396, or complement thereof.

2. An isolated polynucleotide comprising a nucleotide sequence having at least 95% sequence identity to 30 contiguous nucleotides of any of SEQ ID NOS:1-2396, or complement thereof.

3. An isolated polynucleotide comprising a nucleotide sequence having a sequence of nucleotides that is identical to 30 contiguous nucleotides of any of SEQ ID NOS:1-2396, or a complement thereof.

4. An isolated polynucleotide comprising a nucleotide sequence having a sequence of at least 50 contiguous nucleotides of any of SEQ ID NOS:1-2396, or a complement thereof.

5. An isolated polynucleotide comprising a nucleotide sequence having a sequence of at least 100 contiguous nucleotides of any of SEQ ID NOS: 1-2396, or a complement thereof.

6. An isolated polynucleotide comprising a nucleotide sequence having a sequence of at least 200 contiguous nucleotides of any of SEQ ID NOS: 1-2396, or a complement thereof.

7. An isolated polynucleotide comprising a nucleotide sequence having a sequence of at least 250 contiguous nucleotides of any of SEQ ID NOS:1-2396, or a complement thereof.

8. An isolated polynucleotide comprising a nucleotide sequence having a sequence of at least 50 contiguous nucleotides of any of SEQ ID NO:222 or complement thereof.

9. An isolated polynucleotide comprising a nucleotide sequence having a sequence of at least 50 contiguous nucleotides of any of SEQ ID NOS:2-2396, or complement thereof.

10. An isolated polynucleotide comprising a nucleotide sequence having a sequence of at least 150 contiguous nucleotides of any of SEQ ID NOS:2-2396, or complement thereof.

11. An isolated polynucleotide comprising a nucleotide sequence having a sequence of at least 250 contiguous nucleotides of any of SEQ ID NOS:2-2396, or complement thereof.

12. A recombinant host cell containing the polynucleotide of any one of claims 1-11.

13. An isolated polypeptide encoded by the polynucleotide any one of claims 1-11.

14. An antibody that specifically binds to a polypeptide of claim 13.

15. A vector comprising the polynucleotide of any one of claims 1-11.

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<110> Williams, Lewis T.
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Innis, Michael A.
Garcia, Pablo Dominiguez
Sudduth-Klinger, Julie
Reinhard, Christoph
Giese, Klaus
Randazzo, Filippo
Kennedy, Giulia C.
Pot, David
Kassam, Altaf
Lamson, George
Drmanac, Radoje
Crkvenjakov, Radomir
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tgcgttggcc tcttcgaaat gtcgcgggta taaattcgct gaggagtgct tgtgaccacc 360
cttctaacga ttcttctacg tgtgtagctc tccagctc 398

<210> 9
<211> 382
<212> DNA
<213> Homo sapiens

<400> 9
agaggaggag aatcgggagc acaagaagga ggaggagatg aagaggtgaa ggagaggagg 60
aggaaaggag aagagaagga ggaggagaaa agaaaggagt ggagaaagag gagaggagga 120
gaaaaaatag gaaacgaaga ggagaagaat aggaggagga aaaggatggg agaaaagaaa 180
aaggaaaagt aggaggagta gaaaaagagg agaaggagga agaagaaaga gaaggaggag 240
acgaaaagaa tgagaaaaag aggagaggag aatgaggaga aggcgtataa gataagaacg 300
aggagaggat taagaaggag aagtagagga ggaggagaga agaggaaagg aggaggaaag 360
gagaatacaa ggaggaagag aa 382

<210> 10
<211> 326
<212> DNA

<213> Homo sapiens

<400> 10
ccaaccagat gttgactgtc atcactggga ctcaactggg aaaccctctt tttcctccaa 60
atttgctgct ctaggtgcta agggtctgta ggacagagct ttgggactgt tagaattcta 120
tcagaaaaaa acgagacaga aggctataag catgagtgtg ggcagggtgc tgtggttcac 180
ttctgtaatc ccagcacttt gggaggccaa ggtaggagaa tcccttgaag ccaggaattc 240
aagaccaccc tgggcaatat agcaaaacca tgattctaca aaaaattaaa aagttatctg 300
agtgtggtgg cacacacctg tagtcc 326

<210> 11
<211> 286
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(286)
<223> n = A,T,C or G

<400> 11
gaagaaggtg gggaggaaga ggaggaggaa gaagaaggtg atggtgagga agatgatgga 60
catgactatg cggaatctgg atcagctatg tgtaatcggg ctgctgaata ttattaggat 120
gacgagtgtg atacctacaa gcttatnact tgggaggctt gctcttgtag tatcgcttgt 180
atcttttgga ggttgtagac tatatgttct ctgttttcct tttttctctt tctttttta 240
atgaaaaaaa aggacctctc ggtttatttt gtgtggttat ttatcg 286

<210> 12
<211> 325
<212> DNA
<213> Homo sapiens

<400> 12
gcggtctggg ctcactgcaa gctgcacctg ctgatgtcaa gcaactctac agcctcatgc 60
tcccaagtag ctgggattac agcagcgcac cattatacct ggctaattgt tgaataatta 120
gaacgggagg agatttgcta taggaaagtc ctaaaataaa ggaaaagtga tgagccctaa 180
taaacaagta gtgtttttga ctcagcattg aaaaaaatga atgagctatg accaggagat 240
ctaagtttct tttggtggct aacatgcaca aaagttatct gttcaataag ggtagtattg 300
atggtccata tctcatatta actag 325

<210> 13
<211> 320
<212> DNA
<213> Homo sapiens

<400> 13
agcctcctga gtagctggga ctataggcgc ccgccaccac acccggctaa ttttttttgta 60
tttttagtag agacggcgtt tcaccgtgtt agccaggatg gccttgatct cctgacctcg 120
tgattcggct gccttggcct cccaaagtgc tgtgattacc agcgtgagcc gccgtgcccg 180
gccactagcg gcatttaatt aaagagatct tggcgccgtc tctcgtatac tattgcctct 240
aaccttgcgc gtgaccctgc ctgatcctta gtctgcttat tggaataacg gggatgtcct 300
tgctttcaca aggtttgatc 320

<210> 14
<211> 353
<212> DNA
<213> Homo sapiens

<400> 14
cgggcctggc ggatcacctg cggcagttag tttgagacca gcctgaccct ttttttgaaa 60
cccgggctat actatagata caaaagtagc tggtcgtggc ggcacatgcc tgtattacca 120
tctactatgg agggagaggc tggataatca cttgaacctg gtaggcgaag gttgtggtga 180
gccgagatcg caccattgca ctccagcctg ggcaacaaga gcgaaactac gtctcacaaa 240
aaaaaaaaaa aaaatctttg gggccggttt ttaaatgaac tcgacatgga agcacacact 300
tgtaggcttg ggcacacccc aaagcttgag cggcgggaaa aaattgtttt ttg 353

<210> 15
<211> 349
<212> DNA
<213> Homo sapiens

<400> 15
gaatccagat ggcaagaatt gtctttgcta cccctacatc tacggtttac tttgatgagc 60
aattggcttc attatttggg ccaccacttt tatatacata ctgggtttgá gggcagcaac 120
cagcattctt ggctaagata aatgaggctg ggcacagtag cttatgcctg taatcccagg 180
actttgggag gcctaggtgg gaggatcact tgagcttagg agttctagac tagcctaggc 240
aacatagcaa gaccctaact ctaaaacaat ttttttttt ttttttgga gaagagtttc 300
actttttgg cccaagctga gagggacgct gccacccgga ggattcctg 349

<210> 16
<211> 405
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(405)
<223> n = A,T,C or G

<400> 16
cgttgctgtc ggtcaaaact gtctttaaaa atcctaccca tccctttaag ttcagttgaa 60
aattacctct tatataaagc ttctgctaat ccctccattt cccagcccca gaggggactg 120
ttttttccaa aggggacttt tttctgaacc cccataatgt tttatgcttc ttatatggag 180
tttatataat tttgcattgt attggaatca tttaggtaat tgtcttatct tcattgctag 240
agtgtaagct ctttaaggta aagacagtgt tattcagtta attatctccc caaataccta 300
ntatagcatc ttaggcctat ctagtagata ctcaaaaaat atatatccta ataaatgtga 360
ttaagctatc acatttagtg cctatggtag gcactaaatc aaggt 405

<210> 17
<211> 307
<212> DNA
<213> Homo sapiens

<400> 17
gcagtggcat gatctcagct cactgcaacc tccgcctccc aggttcatgc cattctcctg 60
cctcagcctt ccgagtagct gggactacag gctcccgaca ccatgcccag ctaattctct 120
ggattgatag tatagacggg tttttattgt ttttttccac atttttcttt ttagtattgc 180
ctatatttcc tcggcatctt gtacctaata gtgtgcgttt aaaaaattgc ctggcaacat 240
atatacgctt ttttatttt atgacttgaa taaaaaaagg tgggactccc aatttgttct 300
cgcacct 307

<210> 18
<211> 138
<212> DNA

<213> Homo sapiens

<400> 18
acagttttaa acaacaggaa gtcttcattc ccttcctggg tgtctttggt catctgggcc 60
ctgatggtgg agccatgcca gatagaggga ttatgatgct taaatctagt aggattactg 120
gtggagccgc ttgaatcg 138

<210> 19
<211> 324
<212> DNA
<213> Homo sapiens

<400> 19
atgtgtatac atcctggtaa attttatgca tgtgaaataa cactgttgag tttgttcagt 60
cagtatttct acattttaaa tgaaaaaaaa tgctgatcct attcattgga gaaaacaacc 120
cacgaaacaa ccccccaata tggtagaata aatgcctatt tctaaggtgc tatagtcttc 180
caatgcacac cttcaggttc agacttagac aagaccaaaa tatactttag ttctaatcac 240
cctcctaaag acaccacggc agagtgcact cccaacctct accatacata gcggaaaggc 300
acacactact actgtgagct gaaa 324

<210> 20
<211> 280
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(280)
<223> n = A,T,C or G

<400> 20
atgtgtatac atcctggtaa attttatgga tgtgaaataa cactgttgag tttgatcagc 60
caatatttct acattttaaa tgaaaaaaaa tgctgatcct attcattgga gaaaacaacc 120
cacgaaacaa ccccccaata tggtataata aatgcctatt tctaaggtgc tataaggctt 180
ccaatgcaca cccttcaggt tcagacttag acaagaccan aatatacttt agttctaatc 240
accctcctaa agacaccacg gcagagtgca ctcccaacct 280

<210> 21
<211> 317
<212> DNA
<213> Homo sapiens

<400> 21
agagaatcac tctaaagcag tggttctcaa cctggctgca cattaaaatc acctgggatg 60
ttttaagtct cagctcccag gcttcacccc aggttattat atgaaaatct ggggttgaaa 120
ctcaggcatc agtgtatttc aaagctcacc atgtgattcc aaggtatgtg catatttgag 180
agcctttgcc ttaaaagaag gagcaggtga ctcatactag caagatagtg aacagatcac 240
caggccagcc ttgtgggtag aaataatcgt gacactctga cactgttctc tactaagtta 300
atcaacatgt ttacccc 317

<210> 22
<211> 231
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(231)
<223> n = A,T,C or G

<400> 22
agggagctgg ccactctacc actctggtct cattcttcat atctgcagaa tgcgggtgaa 60
aatggcaccc cctcacaggt gtgtgctggg attactgaga taatgtgtaa aacttagctg 120
agggccctgg ccctacaaag gggtcagttg gtattagtca atttcaaagg cctacattnt 180
ccttgtctat aaaattaggg gctcagacag atgattttga ggtttctctt g 231

<210> 23
<211> 384
<212> DNA
<213> Homo sapiens

<400> 23
cgttgctgtc gaaactgcca cggccactag gagtctaagg acacatccaa tttccattcg 60
catccaaaat ggaatccgag acagaaagag gaccttagcc ttcatatctg ttttttttctt 120
atgaagcttc ttctggttgg aaacttgtca aatttcatca ggtaagaagt gctaaagtga 180
acctgtaaac tttgtttcaa aaaacaaaaa ccgaagttta agaaatctaa agatggtgtc 240
agccttagac agatctctgg actgtaatct gggaaaggtc aaataagatc tccaatcgtg 300
tacaattcca aatacatttg agagcagtgg gtctgaaaat gtggttccca gaccagcagc 360
atcaacacca tgaaggaagt tgtt 384

<210> 24
<211> 350
<212> DNA
<213> Homo sapiens

<400> 24
gtagatggga gtacaggcac acaccaccac gcctgactaa tttttgtaga gacagggttt 60
tgccatgttg tccaggctga tcttgaactc ctgatctcag gtgatctgcc cgcctcggct 120
tccgaaagtg ctgggattac aggcatgagc caccatgccc ggccgatgtc tgcattttca 180
taggtgacca ctgaggctaa aaagcatcac tattccaaat cactattcca aaggcattaa 240
ctcctgatgg tgacatctca ggcacttaga cacttgtaat ttattcatca aacatgcctg 300
agacagataa cattttgcta ggtgctcagt ctgcaacgat gtattggact 350

<210> 25
<211> 149
<212> DNA
<213> Homo sapiens

<400> 25
tggttcgcgt tgtgaaaata cgatatacgt gtacctgctt ctgatatagt ctacccactc 60
ggtgctgcct gtgtttaact ctgctcctat cgatacacgc ttcatctcca taccttttac 120
tattgtctct cccttgcact tattcgctg 149

<210> 26
<211> 379
<212> DNA
<213> Homo sapiens

<400> 26
ttaacacagc gaaaccccgt ctctactaag aatacaaaaa attatccagg tgtggtggtg 60
ggcgcctgta gtcccagcta cttgggaggc tgaggcagga gaatggcgtg aacctgggag 120
gcggagcttg cagtgagccg agattgcgcc actgcactcc agcctgggtg acagagcaag 180
agtccgtctc aaaacgaagc agcgcataaa agaaggacga aaccaccgcc aaccaaccaa 240
acaaaaccca aaaaacccaa agtaacggag gtggccgagg gagctgggga taggggagga 300

gtccaaacac ctgggagcta gaagtttcag aaaactgtaa gtcttttggt gtcactaaaa 360
gatacaggat gaatgatcg 379

<210> 27
<211> 388
<212> DNA
<213> Homo sapiens

<400> 27
cgttgctgtc ggattcacct cctctcacca aatatttaac tacctgctga atacgcctct 60
gtactaggca cataatggaa ctaaaaaatg ctcatgtcca gtttttgtgt tgagtgaaca 120
atgctgcaga ccctaataag attgggtaca gatcggcatg cgcctgtagt cccagctact 180
caggagaatt gcttgaacct aggaggtgga ggttgcagtg agccgagatc gtgccactgc 240
actccagtct gggcaacaga gcgagactcc atctcagaaa aaaagaaaaa aagactgggt 300
acagatgtga tattggaaga aaaagatcaa gctgatgagg ttaggatacc caggcccttt 360
ggacttaaag atcactagtg tctaaatt 388

<210> 28
<211> 237
<212> DNA
<213> Homo sapiens

<400> 28
gattgcccca ctgcactcca gcctgggtga tagagcaaga gcctgtctca aaaaaaaaaa 60
aaaaaaaaaa aatttggggg gggtttttt gggtattccc aacgtggaaa aaacctttgg 120
ggggttgggc caaccccct tttaatgggc gggaaaaaaa gggtttttt ggaaaattgg 180
gggaggtttg ggtttttttg gacccctttt aaggggggaa aaaccagttc accaccg 237

<210> 29
<211> 211
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(211)
<223> n = A,T,C or G

<400> 29
agatcgtgcc actgcactcc agcctgggcg acagagcaag actctgtcta anaaaaaaaa 60
aaaaaaaaaa aaaaaaaggg gggccttttt ttccgaaatc ccacactgga aaaaatcttt 120
gggggggttg gaccaccccc cccttaaagg gcggggaaaa aagggttttt ttgggaaaat 180
tggggagctt tttgttttat tgcacccctt a 211

<210> 30
<211> 282
<212> DNA
<213> Homo sapiens

<400> 30
tagcaagaca ctgtctctac aggggaaaaa aaaaaaaaaa acctggccct taaggagata 60
aattatttta gccggtaaac ccgggaggca aaaccctccc aattccgggg catgggcttt 120
aatggaaggg ggccaaaaaa acctgtttta attcccaccc tttgtttagg gggccctttt 180
tttgtttttg ccctgattaa agtttaaccc caacggccaa atcctcttat acctagacat 240
ttaatttcat aaaggggggg gggggtagc caaagggaaa aa 282

<210> 31

<211> 363
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(363)
<223> n = A,T,C or G

<400> 31
ggagcggagg cgtcgggaaa acgcgccagg gaaatgagcc angggcaaga atcgaggcgc 60
ttctcggccg tcgaaggcag cttaggactg ctgagagact gggtaaggca gcgtccttac 120
cttggaatgc cgcagaaccg ggcttcatta gagcactggt gcatactctt aaaaattatc 180
tcggtaccgg ttcgtatttt atttagtgga tttaatcgtc tgggaaggag gttctagccg 240
cagccaatct tacagacgcg cagaatatta atctattttg tgccgactta aggcacgcat 300
attttaggat ttgtgggttc ccaagaccta tcccaacgaa ctcaagagaa gggggaaggc 360
cag 363

<210> 32
<211> 331
<212> DNA
<213> Homo sapiens

<400> 32
ccatcctggt caacatggtg aaactctatc tctacaaaga agacaaaaat cagccaggct 60
tggtggtgag tgcctggagt cccagttact caagagactg aggtggaaag attgcttgag 120
cccagatgtt gaagttgcag tgagccaaga tggtgccact gcactccagc ctggttgaca 180
gagtgagacc ctgtctcaaa aaaacaaacc aaaagaaaag agagagagag agagaagtta 240
agaacctgaa tattctaaga aagaggttct gagagtagaa attcagctga acccatattt 300
tcacaggaag tgagccaaga aggggaaaaa a 331

<210> 33
<211> 377
<212> DNA
<213> Homo sapiens

<400> 33
ggcacgaggg aaaacaggcc ctgggcccgc tgatgtgcat aattccacgt ttgccccca 60
tgtaaccagg atggtaaatt acaggtgtca gataatcacg ctctggagtg gctacttgag 120
gatgcgatcg accaatttaa gctccgtctg acacatgatc aatagcccgt gatgctgcat 180
ggaattgcag gcacagcgtc caaacctgca gagcagtggc tcccagctgt ggcaactttg 240
ccccccagag gacatttggc aatgtctgga tatgtttgca attgtcacaa ctaggagagg 300
gggatgctat tggcatctgg cgagtgaggc caaggatgct gctaaacctc ccatgatgca 360
caggagaagt ccccacc 377

<210> 34
<211> 358
<212> DNA
<213> Homo sapiens

<400> 34
ggaaaataac tcggattgca ggaagaatcc aggtccctgt ggctacagga ctgaggccct 60
gtttccttcc tggcagggga ccactcttag cccctagagt ccttgcatct aggggccagc 120
aaatccttct cactcttggg acctctctaa catcctcctt caccacatag ctctcatttc 180
ttgccagaga atgctctctg cttttcagga ctcagataat ttagccttcc caggtaatcc 240
aggataatca atctactttg agatccatac cctttaatca catctgcaaa gacccttttg 300
ccatgtaaca tgacatgatc acaggtgtta gggattagag tgtggctatc tggggaaa 358

<210> 35
<211> 275
<212> DNA
<213> Homo sapiens

<400> 35
gtccattctc ctcccttccc caataacaga accccagttt tgctgcagaa ggcaatgtgc 60
ccagctaaag ggcaacattt ccagcctccc tggcatatat ggtatgactg tgtggctgaa 120
ttctaggata ttagatataa acagaaggtg ctggaaggta tctccaagaa tgccccttga 180
atagaagcag tattgatgaa ggccattttt gtcctctctg cttcagcctg cattcagcct 240
tggatgcata tgtgatagct ggaacgccag cagcc 275

<210> 36
<211> 362
<212> DNA
<213> Homo sapiens

<400> 36
atgccagtag tatttttgtt tttttcactg agtctattgt gtctagaaaa gtgcttatca 60
cattgtagat tctcaatgaa ctacttattg aatgaacagt cctatgaacc aggtatctcc 120
cttggccaga ttttacctaa tgaagattct gcagcagtga gaacttgcct agagtcacat 180
cgtcaaaggt ggagctagaa tctgtaagca acctggctct ctactcttta ccactgctgc 240
atggtactgc atggtgcctc tcatttatgt ggtgaaattt caaagtacta ttttttatgg 300
ttcccttact agacaggtcc ctcgcagcag gggatactaa ctttatctct ggtccctgac 360
tg 362

<210> 37
<211> 410
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(410)
<223> n = A,T,C or G

<400> 37
ggcacgagcc acacctggcc ttctccatgc tcggaataac ttcctgcagc gaccaacagg 60
ctaaagaggg ggaaggtctg gaggttggaa agaggactgg aatctgattg gggttccaac 120
aaatctgtaa caccgctggg aacgactggg tcccctttag gtcctttagg acagcgtttg 180
aaatcttgct ttcccctgca gggatccagc accggctcct cctccggcaa ccacggtggg 240
agcggcggag gaaatggaca taaacccggg tgtgaaaagc cagggaatga agcccgcggg 300
agcggngaat ctgggattca gggcttcaga ggacagggag tttccagcaa catgagggaa 360
ataagcaaag agggcaatcg cctccttgga ggctctggag acaattatcg 410

<210> 38
<211> 325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(325)
<223> n = A,T,C or G

<400> 38

ggaatgtgga cacacatatc agaactttca tgcttacttt ctcaggatgc ttgtgatctc 60
aaagttagga caggagtgaa tttcaaaggc caaatggaaa attagcaaca atcccatctt 120
aagggcttat aaagagtatc agaatcattc ttggggttgg gccggncatg atggctcatg 180
cctgtaatcc tggcacttcg gaaggccaag gagggtgggt cacctgatgg caggagtttg 240
agaccagtct gggcaacatg gttataccct gtgtctactt gccaacccta aatttactta 300
gcgataaagg gggggtccct tttag 325

<210> 39
<211> 398
<212> DNA
<213> Homo sapiens

<400> 39
cgttgctgtc ggaaccaatg gatgtcagta ggagtttctg ttaaatgtct ccttgatggg 60
gactcagtac tgtgtagaga cgctgtgttt ctcttctggg ggtgtgcatc agaaccactg 120
gggcctttta aaatctacag atgccggccg ggcgccgtgg ctcacgcctg gaatcccagc 180
acttggggag gctgaggcgg gcggatcaca agcgcaggaa attgagacca tccttgccaa 240
tatggtgaaa ccccatctct acaaaaaata caaaaattac cggggtgtgg tggcgtgcac 300
acctcccagc tacttgggag gctgaggcag gagaatcgct tgaacccggg aggcaaagat 360
tgcagtgagc cgagatcacg ccactgcact ccagcctg 398

<210> 40
<211> 339
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(339)
<223> n = A,T,C or G

<400> 40
agacagtgtt ccaccatgtt ggccaggctg gtctggaact cctgacctca agtgatctgc 60
ccacctcaac ctcccaaagt gctgggatta caggcatgag ctgtgacacc catcgtgtct 120
aatttttgac agataaaatg atttcatgat ccaacatttc cttaccagtg agggattcaa 180
taaaatacca attctcagag ggcctttaca cttctttttt ttttttttct aaagaagatt 240
gtttattacc cacgagataa ttttgaaaag ccatcatttt ttttctgctt gtgacccgaa 300
aaaacgtcca gtgttctcgc gatttctttc atctctttn 339

<210> 41
<211> 350
<212> DNA
<213> Homo sapiens

<400> 41
cgctaggaaa tgctgccctc acactcgagt cagctcatct gctccgggct gtgtctgctc 60
ggcaaactag acaagggcaa gcgatcccac acctctcaca cagaacttct agaaaagatg 120
ggcctctcca ggtgcggtgg ctcacactgg taatcccagc atttcagggg gccgaggcag 180
gtggatcatg tgaggtcagg acttcaagac cagcctgacc aacatggtga aatccccatct 240
ctactaaaaa tacaaaaata aataaataaa ataaaaataa gccgggcgca gtggctcacg 300
cctgtaatcc cagcactttg ggaggctgag gcaggtggat cacaaggtca 350

<210> 42
<211> 360
<212> DNA
<213> Homo sapiens

<400> 42
ttgggaggcc gaggcgggtg gattatttga ggtcagtcgt tcgagaccag cctggccaac 60
atggtgaaac cccgtctcta ctaaaaatac aaagattagc tgggtgtggt gacgtgcctg 120
taatcccagc tactcgggag gctgaggcag gagaatcgct tgaacccatg agctgagatc 180
acaccactgc gcttcagcct gggccacaga gcgagactcc gtctcatcaa aaaaaattat 240
atgacccctg tctataaatg ataagagtga gagagaaagc acccagggtt tcaaatgcct 300
tatgcctgct gggactaact ttgcccatac attgtgctaa atactttcca ttaagtctcc 360

<210> 43
<211> 353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(353)
<223> n = A,T,C or G

<400> 43
gattacaggc gtgcaccacc atgcccagct agtttttgta tttttaatag agatgaggtt 60
tcaccttgtt ggccaggctg gtctcgactc ctgacctcag gtgatccact caccttggcc 120
tcccaaagtg ctgggattac aggtgtgagc cactgcgccc ggcctactac atacatttct 180
aannnnnnna nnnnnnnnnn nnnnaaaaag gggggccgtt ttttccttaa acccaaactt 240
gaaaaaaccc tttgggggggg tggccccccc ccccccttaaa tggcggggaa aaaagggttt 300
ttttgggaaa attggggcgg ctatgcgttt tttgggcccc cttagagccg gca 353

<210> 44
<211> 331
<212> DNA
<213> Homo sapiens

<400> 44
gagaatcgct tgaacccggg aggtggaggt tgcaatgagc caagatcgca ctactgcact 60
ccagcctcgg tgacacagct acactccgtc tcccctactc gccaaaaaca aaaacaaaaa 120
aaaagagtgc agagaactgg aggtggcggg aaaagcgctt ggattctcct ttgacatgct 180
cttccctggc aagatgggat cccttggaaa attttaagtg gaaaagtgac acgatttatg 240
gctgagtgca gcagctcacg cccgtaattc cagcactttg ggaagctgag gcaggcactt 300
tgggaggctt taggtcagga gttcaagacc a 331

<210> 45
<211> 348
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(348)
<223> n = A,T,C or G

<400> 45
attactgata tgggggggtat ggtctagtcg ctgtgctgag catttcatat aactgggctt 60
tttctatcct cacagcatag cctttgagat aggtatgtgg aactattccc attttacaga 120
taaggatcct gaggcttaga gagttcaagt gacctaccca agggcacatc actgataaag 180
ggcagaggtg ggattcaaac ccacatctgt caggtgcaag tgcaaggctc cttctcctca 240
tgctcactgc ctgctgggga atagggtact ggggacatac cccagggagc ccttccccat 300
gttctgagtc ccagntcatc ccatgctgct attttgctct cccaggag 348

<210> 46
<211> 357
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 46
gattacaggt gtgagccatc gcgcctggcc cctgcaactt atctttctat atttctcatt 60
tttcacatga aaaggttggt ctattgtatc tgattttatg gaagctgtgc tctgtatttg 120
tgggttctga aattgtgctt atgatatgac tcattactga ttgtttcaca tcttagagat 180
gaggttagac tgaaatgtgg accggaagcc tatttttgtg tttcaattta aaaaataaag 240
ccaggcgcag tggctcacgc ctgtaatccc agcactttgg gaggccaagg caggcggatc 300
atgaggtcag gagattgaga ccatcctggc taacatggtg aaaccccggc tatactn 357

<210> 47
<211> 353
<212> DNA
<213> Homo sapiens

<400> 47
tcctgcctca gcctcctgag tagctgggac tgtaggcgcc caccacctcg ccccgctaat 60
tttttgtatt tttagtagag acagggtttc accgtgttag ccaggatggt ctcgatctcc 120
tgacctcgtg atccgcccgc ctccacctcc caaagtgctg ggattacagg cgtgagctgc 180
cgcgcccagc cataaaactt ctacgaactt ctagcagaag taagggaata gtttctaatt 240
cctgagaaag tattatgatg acagatccta tattctttat tcactagtat atacttagtg 300
tacacataat aagtaggtgt tcaagaattt ttttttttcc ttgagatgga gcg 353

<210> 48
<211> 356
<212> DNA
<213> Homo sapiens

<400> 48
gtagagatgg ggtctcgcta tgtcgcccag gctggtcttg agctcctggc ctcaagcgat 60
cctcctgcct tggcctccca aagtgctggg attacaggca tgagccacaa gcgccggcct 120
ctctcttctt attgggatac cagtcctctg agactcgaaa ctgtgcccca ggccttggcc 180
atactgataa atatctaggc cctacaggag ttcgtgtcca tgaacccagt acacgcaatt 240
cctcagcctt aaaatctagt cactgactca tttcaggccc cagcacagac gaaaacaagc 300
cattctgttt gcccagatta cattgcgggt ctccaagaag tggaatgttc accaat 356

<210> 49
<211> 342
<212> DNA
<213> Homo sapiens

<400> 49
gaggggagct aaaagggaat ggaggggaga ccagcaggag ctctgtctgc ccgattctgg 60
tttgggctgt gagacagtca ttgcattttt ttgcacagtt ctggccacac agtatttaag 120
aggctttgcc tacagacctg agtgactgtg tgaatggtgg cactggtgca tacggggacg 180
cctgaggagg aacagatttg agacttgtcc acctaggact ccctgtggga ttgccagtat 240
caccctctt cgtcattaat tcccagcttg cctgggggag gccaggggt agcatggggt 300
tcgggttccc ctatggttca aacaccaacc catctgctct gg 342

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<210> 50
<211> 305
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(305)
<223> n = A,T,C or G

<400> 50
gcaattgggc atagaacctt ccaactgagc agcgaaggta tcaggatgca gtgtataatt 60
taagacatca aataaagctg acaagcaaag acaataatgg agacttgggg ttaaattagc 120
tgactggagt cagaaacact gggatctgca tacaaagtaa acattaaaca ttgggatgca 180
gtccaggcat ggtggctcga ccctgtaatc ccagcacttt ggaaggccga ggtgggtgga 240
tcatttgacg tcaggagttc aagaccagcc tggccaacac ggtgaaaccc catctctact 300
aaaan 305

<210> 51
<211> 124
<212> DNA
<213> Homo sapiens

<400> 51
gttataggcc ttttgctttt cttagcatat gggggggaggt ggaattacta tcgtagtcac 60
aaatgaccaa aacaggactt cccaatatct atttatttta gcccgggtgc cgcggctctt 120
gccg 124

<210> 52
<211> 218
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(218)
<223> n = A,T,C or G

<400> 52
gcaccaatgt gaagaaccac aaacattggg tctgggagaa ggcttctgag gtggcttcca 60
cagtccatgc aagggacaca gagaagaaca aggctcacag caagtaggat ggcatggtaa 120
aaaacaaaaa gaagaaaata aaaaangggg gccccgaaaa aaaaaaaaaa ggggtccggt 180
tggaaaaaaa aaacaaaggg gtccggttgc aaaaaaaa 218

<210> 53
<211> 373
<212> DNA
<213> Homo sapiens

<400> 53
agtgcagggg aatggaatgg aatggaatga aatggaatgg aatcttccgg aatggaatgg 60
aatggaatgg aatggaatgg aatggaatgg aatgcaatgg attcaactcg attgcaatgg 120
aatggaatag aatggaatgg aatggaatgg aatggaatta accagaatag aatggaatgt 180
aatggaatgg aacggaacgg aacggagcgg aacggaatgt aatggaatgg aatggaaagg 240
aatgcaatcc acgtctattg catttctttt gtatgggaat ggccactaac ccctgttcgg 300
aatggatatg gtaatggatt cggaaccgga gggggaacac ccaccccgta ttgattatat 360
gatagttaat ttg 373

<210> 54
<211> 395
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(395)
<223> n = A,T,C or G

<400> 54
cgttgctgtc ggggagattg agaccacggt gaaaccccgt ctctactaaa aatacaaaaa 60
attagccagg catggtggcg ggcgcctgta gtcccagcta ctcanagagg ctgaggcagg 120
agaatggcat gaacctggga ggtggagctt gcagtgagcc gagatcgcgc cactgcattc 180
cagcctgggc gacagggaga ctctgtctca aaaaaaaaaa aaaggttaaa ataaataaaa 240
cccgggggtt taaagggaac ctttaacctt tgggtttttc gggaaaccca tcaggggggag 300
gggggttgg ctttgtggga ggatgggccc caggtttcct aaaggcctgg aaataatttt 360
ttagggataa aggcttccat caagagactt ttggg 395

<210> 55
<211> 303
<212> DNA
<213> Homo sapiens

<400> 55
cccaggttca agtgattctc ctgcctcagc cttccaagta gctgggatta caggtgtgca 60
ccaccacgcc tggctaattc catgcctggc tctcttactg taaatgagaa taagaaagaa 120
tatactctgc tcaaagtctt agtataatag catgtctcaa aatagaaaat tgggcagagt 180
gttcataggg tttcagagac tcagctggat gttaaaatca cccagggtct aggctgggtg 240
caatggctca tgcctgtaat cccagcactt tgggaggccg aggcgggtgg atcacaaggg 300
cag 303

<210> 56
<211> 236
<212> DNA
<213> Homo sapiens

<400> 56
cgggatgcta gatgactcca tcagccaata tgttagcatt atctagaggc cttatgtgaa 60
gtcctagtgg tcctttccag ttctatgact ttaaacatac aggtgaatca gagcttcagg 120
aaggcctaga ccaacagcta ttactgaagc tcccatttgt gcttaggact atgcatagag 180
aaactctcct ttgggacttg gttagggtcc aaagccctaa ggtcaaaaca ctaatt 236

<210> 57
<211> 317
<212> DNA
<213> Homo sapiens

<400> 57
gggtatgcat cccattcccc tctccccaga ctggacgctc ttaaagggca acacttatac 60
ctcatttagc cttgtattcc ctgcacaggg taagcattag gtaactgctt gctgaattac 120
ttactttgga ttagagaaga gcgaagatat agcacataaa agttactgaa cagtacagtg 180
tcaaactcag atcttagata aaatggttgt gtaacactgc tgtgctaatg agtccattct 240
gacccaaagt caagaacagg agaatatgct tgtccatagg tatgctcagg aacttctcag 300
ggagtaaacc aatcagc 317

<210> 58
<211> 315
<212> DNA
<213> Homo sapiens

<400> 58
gattacaggc gtgcaccacc atgcccagct agtttttgta tttttaatag agatgaggtt 60
tcaccttgtt ggccaggctg gtctcgactc ctgaccttag gtgatccact caccttggcc 120
tcccaaagtg ctgggattac aggggtgagc cactgcgccc ggcctactac atacatttct 180
aatgaaaaga aaaaaaaaat taattaagag gggggggctt ttttctggag acccgcatgg 240
gaaaaaagct tttgggggggg ttggcccacc cccatttaaa tcgggggggaa aaaatggctt 300
ttttgggaaa tttgg 315

<210> 59
<211> 416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(416)
<223> n = A,T,C or G

<400> 59
ggcacgaggg gagtcccaag acccctttcag ggaggatctg tgaggtcaac tgttggcact 60
gtggcatgaa tcaaggtggt ggcagcaaac ttctagtagt tttgatatgt ccttgataga 120
acaaatagca atggttaact attaaatgtt gacctagcca gcgcagtggc tcatgcctgt 180
aatcccagca ctttgggagg ctgaggcggg cggatcacct gaggtcggga gttcgaggcc 240
agcctgacca acatggagaa accccgtctc ttctaaaaat acaaaattag ctgggcatgg 300
tggtgcatgc ctgtaattcc agctactcgg gaggctgagg caagagaatc gcttgaatcc 360
ggtaggtgga ggttgcagtg agccgagatc ataccattgc actccagccc aggcan 416

<210> 60
<211> 264
<212> DNA
<213> Homo sapiens

<400> 60
atccacccgc ctcagcctcc caaagtgctg ggattacagg cttgagccac tgcgcctggc 60
cgccacaggc ccactcttaa aaagataatg cataatataa gattttgctt ttctttttctt 120
ttgtttcttt ctgctctgac aggtaacttt gattgtcatt gacagtttta agaattcagt 180
accaaccact gaaagggtat gaatatcctt gcttaaagaa agttaaaaag accaggtgta 240
gtggctcacg cctgtaatct cagt 264

<210> 61
<211> 407
<212> DNA
<213> Homo sapiens

<400> 61
gttgctgtcg acatgatgta ataagaattc atttctgaca tattttacat ttctggcaat 60
ctcaactctt atttggaata cttctgtgca tttgtctgtc caccgtaatt ttagaaaagc 120
atatccataa cgtttacagt tgtagtacag ttgtggttag ttatttgtag tgggattgaa 180
agtaattttt ttctttttat atttctatat ttagtttgtt tttttgttgt tgttgctttt 240
tgagatggag tctcgctttg ttgcccagac tggagggcag tggcgcgatc tcggctcact 300
gcaacctctg cctcccgggt tcaagcagtt ctgcctcagc ctcccaagta gctgtgacta 360
aaggtgcacg ccgccatgcc cagctaattt tttgtatttt agtagag 407

<210> 62
<211> 157
<212> DNA
<213> Homo sapiens

<400> 62
ggtgcgtgcg cagatcaggg atcgcgattg cgaatcctcc gctgaggtga tttggatatc 60
cctagaacgt tgagggcacg agtcgggtcc tgagaccagg tcctcagcca gcagagccac 120
gttccttatg agcaccgtgg gtttatttca ttttcct 157

<210> 63
<211> 409
<212> DNA
<213> Homo sapiens

<400> 63
cgttgctgtc ggcagtttgc agctgcggcg gggtcgggtc cacccgcggt ccccggaatg 60
ccggacggct gatcccgggt gctggtcact cgccgattcg gggctgggaa ggtttgccag 120
aagcgggaaa gatgggagat ctgagcgctc tcttggcatc gccacaccca ggacttgctc 180
gtgccgcaat tccccacgga aacaaccgag ttgaaacgag aagcttgctc tctgggtgca 240
gtagctagaa ggcttcaggt aactccaaag ccaacactgg gtgaggcaac acacgccgcc 300
tcaggactca gcatttcttt caggctgcgt tttcgtggca gacctaccca gattgatgga 360
gaaagtttgg ctggcggata agaagtaacg cggaagatgt attattgtg 409

<210> 64
<211> 320
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(320)
<223> n = A,T,C or G

<400> 64
cggtctttac cttgttgcac aataacccat aaaggtggga agtggagctt gtatcagtgt 60
gactacgtca ggcccaggta tcaggggggc caaggtgggc tgctccccac agagggcata 120
tttctctaat tgcaaatagg tatgctacag gccagtagga aaccattcat ctctggtttc 180
ccagtctagc cctggcacgc tgttgaccct cagttaatga tacctcgtgt gtgtgtgtgt 240
gtgtgtgtgt gtgtgtgtgt gtgtgtgnrt atttatttt tttgggtttt tttgatttga 300
tgagggagtg ggttttggag 320

<210> 65
<211> 288
<212> DNA
<213> Homo sapiens

<400> 65
gacggggctt caccatgttg gtcagtctcg tctcgaactc ctgacctcgt gatccacccg 60
cctcggccta agaaagtgct gggattacag gcgtgagcca ccggccgctg atggtattct 120
ttcctgaggg cagattttca cgccagaagc cccgacaatt atacctgagc tggttccacc 180
taagctcaat cctccttccc tgccccaagg gggtgaaaaa atctgggccc aggaggtctt 240
ccttgtgctc tgggggggagg catttaaggg tccaaggaag acgtgacg 288

<210> 66
<211> 221

<212> DNA
<213> Homo sapiens

<400> 66
caatgtttcc catgaaggaa tcgaggtccc aagagtagtt caggtaagga attaataagc 60
atcacaggag gcatgtccag gctggcttgt ccccaggccc tctgccttca gccaccattc 120
tcagaagatc caaaaatgcc aaggggaaag aagccggatg ctttttcacc ttaagtgaaa 180
agtcagaatt ggaattaccc tttctgaagg cctgctttgc a 221

<210> 67
<211> 202
<212> DNA
<213> Homo sapiens

<400> 67
ttggatcggg ctgcgataag acgacaggag gggattgtgg gtgagattct ctcccaggcc 60
acaagacatt tcctgctcgg aaccttgttt actaatttcc actgctttta aggccctgca 120
ctgaaaatgc aagctcaggc gccggtggtc gttgtgaccc atcctggagt cggtcccggt 180
ccggcccccc agaactccat ct 202

<210> 68
<211> 324
<212> DNA
<213> Homo sapiens

<400> 68
cggagggtcg gtattgattg atatatggaa atgtaggcac aggtttccag gaacccacat 60
ctttatatcc cctaagagca tgcgattcac aattcacaga tacagtgctt gaggcgagtt 120
tatagaacat aactattgga tataccatga cctaaaggca ttcctttcta aatggaaatc 180
gaaacacaga gcctgacaat ttaaggcaca ctaaattccc ctttcttgta ctttataagt 240
aacgacggat gaggaaatta tatacagtgt aaaacggggt ttggcattgg gctaccactg 300
ctaatgggta catgacttgt gtgg 324

<210> 69
<211> 270
<212> DNA
<213> Homo sapiens

<400> 69
aattcaatct atctgcttga tttgggacat ccagtgctct tgctctgcga cattggagct 60
ccttgttctt aagcctttaa actcaggcag ggattttcac tatcagatct cctacttcct 120
gtttttggac cttggtactc agactggagc ttataccatt ggctttctgg ctcccaggcc 180
ttcaggcttg aactagaact atactgcttg cttccctggg cctccagttt gcagatggca 240
atttatagaa cttctcagcc ttcataatca 270

<210> 70
<211> 314
<212> DNA
<213> Homo sapiens

<400> 70
gtcgtacggg ttatacttca ccggacgact cctctccccc actcctttgt gagtctggtc 60
tcttgccagt ttcttaccct gagtggagct aagcagataa ctcgtggtta ttccaagata 120
gcatctgagt ggagccactt caggactaga gggatgcgtc ctggatcttt ggtctgtctc 180
atgccttgca ccaagcttga gggtgacgta tcatgacctt gctggagtga ttgaacttga 240
tctattgaga cgccattcag gatccctaga aacaagcacg gtagactgct actgtgaggc 300
aggtgtttca acgt 314

<210> 71
<211> 291
<212> DNA
<213> Homo sapiens

<400> 71
cctgtaatct cagctacttg ggaggctgag gcaggagaat cgcttgaatc caggaggcag 60
aggttgcagt gagccatgat tgcgccactg cactccagcc tgggtgacag cgagactcta 120
tctcaaaaaa aaaacagatt tctctcctat gagagtttct ggtctttgat gctgcacttt 180
cctcttctga aacatcaagt gcttttaaag agggatggtg ctgactgcct ggttctgagg 240
catgaacgac actggtaggt gagagcaaga tggtacagag gagttcaaat t 291

<210> 72
<211> 312
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(312)
<223> n = A,T,C or G

<400> 72
ggattacaag cgtgagccac catgcctggc caatttttgt atttttagta gagacggggt 60
ttcatcatgt tggccaggat ggtctcaatc tcttgacctc gtgattcacc caccttggcc 120
tcccaaagtg ctggaattac aggtgtgagc cactgcaccc ggcctttntt ttttttttt 180
ttttttttgg gaaaaggggg gcctcattgg ggtccccacg atatcccaaa acccgggggg 240
aaaagaacac cctttatttg ggccccaaag gggggaaat tgtggagggg ggccccacgc 300
ccttctcggt ag 312

<210> 73
<211> 391
<212> DNA
<213> Homo sapiens

<400> 73
ggcaccagca aagaggaaac agacagtttg attgcatgtc ctcagtgcaa tgctgaatac 60
ctaatagttt ttccaaaatt gggtccagtg gtttacgtct tggatcttgc agatagactg 120
atctcaaaag cctgtccatt tgctgcagca ggaataatga tcggctctat ctattggaca 180
gctgtgactt atggagcagc gacagtgatg caagctgtac gtcataaaga acgactggat 240
gttatggaca gagctgatcc tttattcctt ttaattggac ttcctactat tcctgtcatg 300
ctgatattag gcaagatgat tcgctgggag gactatgtgc ttatactgtg gcgcaaatac 360
tcgaataaac taccaatttt aaatagtata t 391

<210> 74
<211> 275
<212> DNA
<213> Homo sapiens

<400> 74
ggcccgcctc catggcgcag gtttacctat gtgactaacc tgtgcgttct gctcatgccc 60
gccatctttt tgaaagaaaa aaacataacg gaggtggggg ggcctttttt ctggaattgt 120
cccagcgaac atacctctgg gggggttttg tcacaccccc ctttttttg ttttttccac 180
cgttttttt ttgaaaatag gggaacaagt tttgggggg ggctcccttt tgggcccgcc 240
ttgcggggtt ccctttctc ctgggtgtcc gctcg 275

<210> 75
<211> 322
<212> DNA
<213> Homo sapiens

<400> 75
atgttggcca ggctgacctc gtgatccacc cacctcggcc tcccgaattg ctgggattac 60
aggtgtgagc caccgcgccc agactaagtc ccatctttat gtccgcttgg ctgttccacg 120
gccacctgga ggggaggtag gtccagcgat gtgggaccct aggatttcag ggtagaaaat 180
ttgccgcact acagttacaa aattattcca aggtttatgt tcctcggggg attgctatac 240
tcacctgtta tgcactggtg gcaagttttg ttttttttcta ataattaagg ggtgataatt 300
tttttcttaa gcataggggg cg 322

<210> 76
<211> 319
<212> DNA
<213> Homo sapiens

<400> 76
gagagagagg agaatgagga aggacaggcc agaaggtgct catggatccc acagtgtagg 60
gcctggaggc ctctgtaaag ccatgaaggg tgggtgacca caacagtgca tgctctcaaa 120
agaccactct gctggttaga tggtagtcaa gagacaggtc accatgaccg tgagagaatg 180
gagaagtcca gatgtatttg aagaaagctc agatctgcaa atgaaccgag gccgtgcacg 240
gaggctcacg cctataatct taacactttg ggaggccgaa gcaggaggat cacttgaggt 300
cacgaatttg agaccagcc 319

<210> 77
<211> 376
<212> DNA
<213> Homo sapiens

<400> 77
caatggcatg atgtcggctc accacaacct ctacctcccg ggttcaagtg attctcttgc 60
ctcagcctcc cgaacaactg ggattacagg catgcgtcac cacacccggc taattttgta 120
tttttagtag aaatggagtt tctccatgtt ggtcaggctg gtctcaaact cccgaactca 180
ggtgatcccc ctgcctcaac ctcccaaagt gctgggatta caggtgtgag ccatggcgcc 240
cagccccttc ggattctttc tataagcaaa ttgtgccttg gacatatgct ttgaatgctt 300
tgagagaacc tctcttcata agtggaaata aaatcatgat ttaattgtat cacacgcatt 360
atggataatc tatggg 376

<210> 78
<211> 376
<212> DNA
<213> Homo sapiens

<400> 78
tacggctgcc agaagacaac agaaggggta tcttcatcat aggcacaagc ccacagatgt 60
ggaacagtaa agttcacatt ctctttatat agtacaaata ctcttcatta atatagcagg 120
cccataaaga tagtggcaat tgggcaatat atgctttact tgtaggccat tgatagatct 180
ctttaaatga atagtatttt ctaccaaaca ccaaagacag aaacaaaact cgtcaggctg 240
agttgagctc ataccttgaa ttgctcctct gtgttcttcc ttatcaatgg agatcctcgt 300
aagttgagag attctgtcag gaggtatttc atgtgggaat cccctgggct actgggtcac 360
agcagtaact cagcga 376

<210> 79
<211> 339
<212> DNA

<213> Homo sapiens

<400> 79
cccagctact caggaggctg aggcaggaga gtggcgtgaa cgcgggaggc agagcttgca 60
gtgagccaag attgcgccac tgcactccag cctgggcgac agagcaagac tccatctcaa 120
aaaaaaaaaa aaaaaaaacc ccctttaaaa aatttcaaaa acccatggga ggcttttata 180
agggcgggcc cctgaaaaaa aaaaatttgg ggcgctgaag gtggggcttt tgaaacaccc 240
caagccaaaa aaattttaaa aaggggtttt tttaaaaaag aaaaaggccc ggccccgggg 300
tttttggctt gtatcccccc ctttggaggg gccgggggg 339

<210> 80
<211> 366
<212> DNA
<213> Homo sapiens

<400> 80
gaaatctcgc agagcctgat ggtatttgga tagcatatac ccaccagagg aacaggcttt 60
tatctagcat accacaggtc tccccttag cacatctgtg ctcattttga aactgtatag 120
ggaaggacat tagatggctg ggagaactct gaaggacaga cctggatctc ctgccatctt 180
ccaaaggtga aacaacaaaa atccgccagg ctttcagtca gaagcccgga agggccactc 240
ccaaggaaca gaggcaagag cagaagtaga tggagtctta ctgaaactga aacccagctc 300
aattcctaat agggtgaaga tatgagtacc tcaatgcagt ctgcttatca gaaaggcata 360
tcatat 366

<210> 81
<211> 347
<212> DNA
<213> Homo sapiens

<400> 81
aatgattagc acagagaata cgtttggtct caaatattcc caccaaaata tacctccatg 60
gcaatcgggg aaagggagag ggtggtaaat gtcaacccat gagaaaggaa gggtctggag 120
gcacaaatca aaggggacct aagtaggcag gaagtatcac tgaaaacctt caaaatcttg 180
cattatacga cagcattaat ttggccattt aaaatgtaaa aatgggccag gcgcagtgac 240
tcacgcctgt aatcccagca ctttgggagg gtgaggtggg cagatcactt gaggtcagga 300
gttcgagacc agcctggccg acatggtgaa actccatctc tactaat 347

<210> 82
<211> 167
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(167)
<223> n = A,T,C or G

<400> 82
ggagaattat ttnaaaataa aaaaaaaata gggggggcg gttttttcgg aaaccccaac 60
ctggaaaaaa cccttggggg ggtggggcca ccccccccct gaagggcggg gaaaaaaggg 120
ctttttttgg aaaattgggg ggcttttggt ttttttgaa cccttag 167

<210> 83
<211> 303
<212> DNA
<213> Homo sapiens

<400> 83
cctgtaatct cagctacttg ggaggctgag gcaggagaat cgcttgaatc caggaggcag 60
aggttgcagt gagccatgat tgcgccactg cactccagcc tgggtgacag cgagactcta 120
tctcaaaaaa aaaacagatt tctctcctat gagagtttct ggactttgat gctgcacttt 180
cctcttctga aacatcaagg gcttttaaag agggatggtg ctgactgcct ggttctgagg 240
catgaacgac actggtaggt gagagcaaga tggtacagag gagttcaaat ttgggtccac 300
cat 303

<210> 84
<211> 178
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(178)
<223> n = A,T,C or G

<400> 84
tgatatcanc ctgcgactgc aagattctta ctgcagtaca gaactctttt tctcccttgc 60
acttttttt gacctggcat ctttttatag ggaaaaacgg cctttgtcgg cagtggcaaa 120
cttgcaagga aagctgccga ctctttggca ggctgataca gagcctgcac tctggcan 178

<210> 85
<211> 381
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(381)
<223> n = A,T,C or G

<400> 85
actgcgcgcg gcctagctgg aaactttcct gcccagtata tcagtcatat ttctcagcct 60
cactagcagc aggatgtggc catgtttctg gctaatggga tgtaaacgga tatgttcagt 120
gggacttcct agaagcttcc ttaaagggaa gcagacaggc cagaggaggt gcctcatgac 180
tagaatccca gcactttggg aggctgagct gggaggatca cttgaggcca ggagtttgag 240
accagcctgg gcaacatagt aagacaccat ctttacaaaa tataaatttt ttctttttt 300
ttttttgaaa aaaagnttgg ttttgccccc cagcttgaaa ggcaggggcc caatttaacc 360
taattgggag ccccccttcc g 381

<210> 86
<211> 390
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(390)
<223> n = A,T,C or G

<400> 86
cgttgctgtc ggaagaattc gcgccgcagg aaacnacctt ttttttttt tctttttgt 60
ttttttttt ttttttttt ttttttttt ttttttttc cttccccccc cccgggggtt 120
ctctctttgg gaaaaaaaca acgggagggg gggggggaaa aaccccccc cccgggctat 180
caaaaagggt gaacctttct ccggccgccg gggggggaa aaaaccccc ggggccccca 240

agaaaccccc cccccacctt ttttgcgccg gggttttcaa aaaaaaaaaa aaaaaaccgg 300
gggccgcccc ccccttaca taaaaacggg gggggtgct cttcacaaca ggcccccccac 360
gcgccgaggt gcccacaaaa actcccccc 390

<210> 87
<211> 361
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(361)
<223> n = A,T,C or G

<400> 87
ccttcatccg aggaatgtcc ccaaggcagg aggggagaca tgcctgccat caatggcatt 60
ctctgcgggg catggactct gggggctcta aggggcttct gtaggggggg catgcccctg 120
gagaagttag ggcagcttat ggaagccccg gagctccagc ctcacctggc caaggggacc 180
ccacctctta cagagcangg cccagnctcc ctcattctcc aaactacaga gggggaggag 240
cagggaatga gagcactgaa ccaatgagga cagggctggg gggctggggg aacctgcctt 300
ccaactgggg gacataaggc aagcttcgca ccatcttctg agtcaatcct gaatggaacc 360
c 361

<210> 88
<211> 303
<212> DNA
<213> Homo sapiens

<400> 88
gggctcagaa tggcatgaac ctgggaggca gagcttccag tgatctgaga tcgtgccact 60
gcactccatc ctgggtgaca gagcgagact ccccatatta aaagggtggg aaaaaaaggc 120
gggtgttgtt gaacccgggg gccccacttt ttttaacccc ccggatgagg ggggcaatac 180
ccttttttaa cccgccagga actttttttt tttgtccaat cttgggggggg ttgttgtttt 240
ttttaccgca atcaagctcg gaaccagggg cttccacacc ctggtgccct ttttatgagg 300
gcg 303

<210> 89
<211> 356
<212> DNA
<213> Homo sapiens

<400> 89
gtagatggga gtacaggcac acaccaccac gcctgactaa tttttgtaga gacagggttt 60
tgccatgttg tccaggctga tcttgaactc ctgatctcag gtgatctgcc cgcctcggct 120
tccgaaagtg ctgggattac aggcatgagc caccatgccc ggccgatgtc tgcattttca 180
taggtgacca ctgaggctaa aaagcatcac tattccaaat cactattcca aaggcattaa 240
ctcctgatgg tgacatctca ggcacttaga cacttgtaat ttattcatca aacatgcctg 300
agacagataa cattttgcta ggtgctcagt ctgcaacgat gtattgaact tagtcc 356

<210> 90
<211> 335
<212> DNA
<213> Homo sapiens

<400> 90
gtgccaaagg ggagagactg gattttgacg acagtaggag caccttatgt agtacagaga 60
agaaggcaga gtatgtggat acagatgctg tgtggtggtt ggatgtggtg gcggcaattt 120

gcccatgttt tattatcagg gtttacattt tttcactccc gcatgaagct tgagtggtag 180
gacaggggag gaaatgttga ggatttgtgg ggagattttt gaaacaacca tcatatatga 240
tggtatgaaa gagattgcca cggacctagt tgagaggtgg gataaaagcg cttttgttgg 300
ggacccgcag ggggggtgga tattatggtg gaagg 335

<210> 91
<211> 388
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(388)
<223> n = A,T,C or G

<400> 91
attcatggtt ctccatggca tctctggtct tcaacattat tttgcatagg gtctcagaag 60
cttagtgtga gcggatgata tgggcacgaa gcaaggcacc cagaagtggg ggcaactact 120
ctgctttcta aaatgcaagg gaaccggaaa atccaggagc cgtgccaaag tgagtgagta 180
ttttcttggg ccaccaaagg ggtctgaact ggtgtggctt gagctcagtt tttgtggttc 240
agatagattt gaaaactcac ttctccccat taagcactgg aaggaattag tcacccttct 300
ttgtggaagt ggagagattc tccgagagct actcaacagg ctcctttgaa aggttctcag 360
gaccagcact gtgctgagtg tgtgtggn 388

<210> 92
<211> 348
<212> DNA
<213> Homo sapiens

<400> 92
aggtttagcc ccaccaggca tctggttggg gggccgaggt gaggactatt gcatgcttct 60
gtggtctgag ttcccctcaga gtactaaaat ggatttgtgt gtatgcaagg ggaagagagt 120
taggtgggtg cggacagaag cagtcttaac tagaaataca cttactaggg ttttcctctt 180
ttttttttta aaactgtcat gccgggcacg ggggctcgtg cctgtaatcc cagcactttg 240
ggaggccgag ggggggggat cacttgaagg ttagaagttc aaaaccagcc tggcctcctt 300
gataaaacac catttttct aaaaaaaccg aaaattatgt gggcgcct 348

<210> 93
<211> 343
<212> DNA
<213> Homo sapiens

<400> 93
agcctggcca acgtagtgaa accccatctc tactaaaaac acagaattag ccaggcttgg 60
tggtgcgcac ctgtaatccc agctactggg gaggctgagg caagagaatc acttgaacct 120
aggaggcaga ggttgcagtg agcctagatc gtgccactgc actccagcct gggctggaca 180
gagcaagact ccatctctga aaaataaaat aaaataaaat aaaacagaaa aacagaatag 240
aagaagatag ctaagaacca cagtggtcaa gccagcctgg cttcaacaga gatgaatgga 300
gagaccacgg tcagccccat taacagaaga actggggcca gga 343

<210> 94
<211> 355
<212> DNA
<213> Homo sapiens

<400> 94
gcagacacct gatagccagg caggcaacgc ctgctagagt ttctggacca gtggtcccac 60

ttctgtgtga actcagctgg tgggttcagc cacctgttgt cctgggaagc acctggacag 120
tagggcatgc atctctaccc aaacctgcca ctggtagcca tgaaagccat gcctgcttag 180
agctgcaagc ccagcagtcc tgcttctgcc tgaactctga aggcaggcac aaccccatgt 240
ttccctggga agtacatgga cagcagatta cggccaaccc agcaaggata aggcttgtct 300
gacaactgca acccccgccc aacttcatga gagaggtcaa catttaaatt cagaa 355

<210> 95
<211> 402
<212> DNA
<213> Homo sapiens

<400> 95
ggcacgagcc gacacccgga agcctagttg cctggaggtt ctgagcgttc tgttcggacc 60
tcctaccgtt actctttcat tcactcaaga aatgatttct tgagttcccg gcctttgtca 120
gagagatgaa cgaggcacgg tccgtgtcca gctaaaggac agtatgactg gaagagcgtt 180
gttttccaag gtacaggatg ccgcgcctcc tatgagccga agggacggga ggccgcgtat 240
aggaggggac cgtccccgag cctcgccgag cctgcggtgt agacacctct ggtggttagc 300
gcgtgacgat ctggtgaccg cgcatgtcgc gttccaagga ccgttcttac cagaaaatat 360
ctggctgtcg cgaatacatc ttgctgggcc cgccccgtac cg 402

<210> 96
<211> 392
<212> DNA
<213> Homo sapiens

<400> 96
cgttgctgtc gcaaagcatg gttgctgagt acccagagtt gcgaggagtt ttttaactga 60
tttagccagg tggcaatcat gagtgaatgg atgaagaaag gccccttaga atggcaagat 120
tacatttaca aagaggtccg agtgacagcc agtgagaaga atgagtataa aggatgggtt 180
ttaactacag acccagtctc tgccaatatt gtccttgtga acttccttga agatggcagc 240
atgtctgtga ccggaattat gggacatgct gtgcagactg ttgaaactat gaatgaaggg 300
gaccatagag tgagggagaa gctgatgcat ttgttcacgt ctggagactg caaagcatac 360
agcccagagg agtctgaaga gagaaagaac ag 392

<210> 97
<211> 378
<212> DNA
<213> Homo sapiens

<400> 97
cgttgctgtc gctggtctca ggcggtctcc gctcaacgat ccttcctcaa agcatggttg 60
ctgagtaccc agagttgcga ggagtttttt aactgattta gccaggtggc aatcatgagt 120
gaatggatga agaaaggccc cttagaatgg caagattaca tttacaaaga ggtccgagtg 180
acagccagtg agaagaatga gtataaagga tgggttttaa ctacagaccc agtctctgcc 240
aatattgtcc ttgtgaactt ccttgaagat ggcagcatgt ctgtgaccgg aattatggga 300
catgctgtgc agactgttga aactatgaat gaaggggacc atagagtgag ggagaagctg 360
atgcatttgt tcacgtct 378

<210> 98
<211> 400
<212> DNA
<213> Homo sapiens

<400> 98
ggcacgaggg agacagatgg ttttgaactt cagaaaacca ctcattgttg cttcccctaa 60
gatgttactc aggctcccgg cagccgtgtc aactcttcaa gaaatggcac caggaacaac 120
atttaacccg gtcattggtg attcatctgt ggatccaaaa aaggttaaga ccctcgtgtt 180

ctgctccggc aaacatttct actccctggg gaaacaaaga gaatctctgg gggccaagaa 240
gcatgacttt gccatcatcc gagtagagga actctgcccc ttcccgttgg attctttaca 300
gcaagagatg agcaaataca aacattgtta aagatcatat ttggagtcag gaggaacctc 360
agaacatggg gtccgtggtc gtttgtttct ccaaggattg 400

<210> 99
<211> 403
<212> DNA
<213> Homo sapiens

<400> 99
cgttgctgtc ggataaattc gcgtgctaag gaggtgacac tgttattgtt tgtcctggcc 60
attatgtggt acatggcact ttatccattg ctgactccat tgagttggaa ggatatggcc 120
taccagatga cattgtgata gaaaagaggg gcaaaggcga cacttttgtg gactgcactg 180
gtgctgatat taaaatctca ggcataaaat ttgatcagca tgatgctgta gagggaatct 240
taattgatca ccgtggtaag actacgctgg aaaactgtgt gctgcagcgt gagacgaccg 300
gagacacagc gcggacatca gcagagtttc taatgaagaa ctcggattta tatggagcgc 360
agggtgctgg tatttaaaaa taacttggga gtcaatgcgc gcg 403

<210> 100
<211> 390
<212> DNA
<213> Homo sapiens

<400> 100
tcaattccgc tgctgtcgcc actggccttt ttttctgagc aacaaaggag tgcttcatct 60
ggggagtggg aacctgagcc gcggctctat cgttcaaaga gtttaaaaag cattaatgtt 120
catggcgatc tactacgaaa aagccatcct ccaaaagtca gggagcgcca ttttttctgaa 180
agcacttcta ttgacaatgc cctgaggcga ctgacccttg ggaatgaatt ctctgtcaac 240
aatgggtaca tgcgaagatt caaatctttt tctgaactcc cctcctgcga tggaaatgaa 300
agttgggctt atcgcaacgg gaacaaaaca ggacccaggt ccgcgataac tatattcaga 360
cctaacgact attgggaatc ttggaaaaac 390

<210> 101
<211> 260
<212> DNA
<213> Homo sapiens

<400> 101
agtgggattt gatggaaatg tgaaccattt ttcctctttt ctggctccag gttctacctc 60
ttcctgcagg aagtccacac aagctgggat gaggggggagg caagacaaaa gggcagggca 120
agtttgacac aattaacacc tcgatcatgc ctccaaatgc agagggtctt tcagggaagg 180
agaatcaaaa tgtacgggag aaaaatgaca ggagacgaca ggcacggtgg ctcacgcctg 240
taatcccagc actttgggag 260

<210> 102
<211> 333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(333)
<223> n = A,T,C or G

<400> 102
ttttacgaat ttcatctaaa gtgtgtctgg tatatctatg catatgattc attttccatg 60

ttaccatgca cgctgactct tattgaaata gaccgctggg aggcagcatg atggagtgaa 120
aatagcatgc acgttcaaat ctgaaagata tgggtgcaga cacctactat tctgtgccat 180
ttggagaaag tcatccacct cctgtatagg acttttcttg gctttaaaat gaatagatgt 240
cttgaggata ttactggtct caattaaatc aaaatttttg caaaaaggtc tgacactggc 300
cgggcgcgga ggctcacgcc tgtaatccca gcn 333

<210> 103
<211> 459
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(459)
<223> n = A,T,C or G

<400> 103
tgacggcctt ntgcagatcc cctcgactcg aagtccggtg ctgtcgggcc aattctgctc 60
aactgcttgg tgaggctcga gttcagccta atccatcaga acatgagtct cttgcatggc 120
tcaggactgt ccactccgta caccagagga ctttgtgttt ccattgcttc ccaatgaaga 180
attgagagag aaatacaggc gctacctctt cagggactat gtggagagtc attaccagct 240
ccagctgtgc cctggtgcag actgccccat ggttattcgg gtacaggagc ctatagctcg 300
ccgagtacag tgcaatcggt gcaacgaggt cttctgtttc aagtgtcgtc agatgtatca 360
cgcacccaca gactgtgcca caatccggaa atggctcacg aagtgtgcag acgactctga 420
aacagccaac tacattagtg ctcacactan agactgtcc 459

<210> 104
<211> 435
<212> DNA
<213> Homo sapiens

<400> 104
tctcaataga cacttttata tagcagatgc ctttatgagc atgcctgctc tttcgggcga 60
agcggtctac gcttgcgaga aaacttatga aggagaccct gctgtgtttt tctgttgctc 120
ctcagtaact aaattttgct tcagatttct gcttttctac catggggagc aagacaaggc 180
tttgctttga ctgaatccca acctggaaaa agccattatc tccagcctca acactgccac 240
aaggggcat aactgaatca gaggatatac tctatctgag acaaggtatc aaagggatgc 300
cttccggtac tactaactca attcagttca ttcatcatca gcatacatgt aattcatata 360
tagcacaact gctcaggtac ggaaaataat gctgacaagt tggggttttt ttttttttt 420
tttgaagaga aaacg 435

<210> 105
<211> 434
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(434)
<223> n = A,T,C or G

<400> 105
ttttgcagga tcccactcga ttcaattccg tggctgtcgg cctgattaac tgccacggtc 60
acgaggagtc taaggacaca tccaatttcc attggcatgc aaaatggaat ccgagacaga 120
aagaggacct tanccttcat atctggtttt ttcttatgaa gcttcttctg gttggaaact 180
tggcaaattt catcaggtaa gaagtgctaa agtgaacctg taaactttgt ttcaaaaaac 240
aaaaaccgaa gtttaagaaa tctaaagatg gtgtcagcct tagacagatc tctggactgt 300

aatctgggaa aggtcaaata agatctccaa tcgtgtacaa ttccaaatac atttgagagc 360
agtgggtctg aaaatgtggt tcccagacca gcagcatcaa caccatgaag gaagttgtta 420
aaaatgcaaa ttct 434

<210> 106
<211> 214
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(214)
<223> n = A,T,C or G

<400> 106
aaactctgtt ttaggataag tcactaatat agagatagct agttcaattg tgtctggctt 60
cctatcacat cactagcact tagtacagaa ttggggtcct aanaatattt ggcaatgatg 120
acctgtgttg ctttcaagaa agtattccaa gtgatagggt ccaccataat ccatattgct 180
ttaactcttg tacaagtgga caaatttttc tatt 214

<210> 107
<211> 243
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(243)
<223> n = A,T,C or G

<400> 107
gctttcccgg gcgctgattc ctgagtgctg agcgcgaacc cgaggagatg aacccttaa 60
ctaaggtgaa gctgatcaac gagctgaatg aacgagaggt ccagcttggn gtagcgcgat 120
aaaggtgtct ggcactccga gtacaaagac agcgcctgga tctttctggg agggcttgct 180
tatgaactga ctgaagggga catcatctgt gtgttctcac aatatgggga gattggtaac 240
att 243

<210> 108
<211> 426
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(426)
<223> n = A,T,C or G

<400> 108
atattctaat tccgaagctg gngggggggc aaaacaggtc attccatgtt tgaaaggaag 60
ttgatgaagg agcctgggaa agcggggaat tattcacaga gagaaacgac agcagcgtaa 120
acgtgataag gtgctgactg attctggttc attggattca actatccctg ggatagaaaa 180
taccatcaca gttaccaccg agcaacttac aaccgcatca tttcctgttg gttccaagaa 240
aaatagaggt gattctcatc taaatgttca agttagcaac tttaaatctg gaaaaggaga 300
ttctacactt caggtttctt caggattgaa tgaaaacctc actgtcaatg gaggaggctg 360
gaatgaaaag tctgtaaaac tctcctcaca gatcagtgca ggtgaggaga agaggactcc 420
gttcac 426

<210> 109
<211> 124
<212> DNA
<213> Homo sapiens

<400> 109
atctgcctcc cctgtctgta aggagcagcg ggaacggagc ttcggagcct cctcattgaa 60
ggtggtgggg ctgccggatc tgggctgtgg ggcccttgtg ccacgctctt gaggaagccc 120
atgc 124

<210> 110
<211> 364
<212> DNA
<213> Homo sapiens

<400> 110
gagcagactg aacaaatgat gtgagaatct cttcagttcc aaccaagtgg cgggaaccag 60
ctaagagttg ggtactgctg aggaaaattg atgggcagtt ggtaaaatag gtgtgaatga 120
gagaaagctt tgttggggaa ccatggtggg tatgtgggca cgttctacat tactacaagt 180
attgggaatt tcccagggga acagcaaaat cttgtcttat ttatgtttaa ttttaaaaaa 240
ttcccactgg gtgcagaggc tcacgcctgt aatcccatca ctttgggagg ctgatgcagg 300
cagatcacga ggtcaggaga tcgagaccat cctggctaac acggtgaaac cccgtctgta 360
ctaa 364

<210> 111
<211> 421
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(421)
<223> n = A,T,C or G

<400> 111
cgttgctgtc ggcctgataa actgccacgg ccacgaggag tctaaggaca catccaattt 60
ccatgcgcat ccaaaatgga atccgagaca gaaagaggac cttagccttc atatctgttt 120
ttttcttatg aagcttcttc tggttggaaa cttgtcaaat ttcatcaggt aagaagtgct 180
aaagtgaacc tgtaaacttt gtttcaaaaa acaaaaaccg aagtttaaga aatctaaaga 240
tggtgtcagc cttagacaga tctctggact gtaatctggg aaaggtcaaa taagatctcc 300
aatcgtgtac aattccaaat acatttgaga gcagtgggtc tgaaaatgtg gttcccagac 360
cagcagcatc aacaccatga aggaagttgt taaaaatgca aattctcagg ctctcccctg 420
n 421

<210> 112
<211> 424
<212> DNA
<213> Homo sapiens

<400> 112
tttttgcgta tcccactcga ttcaattccg ttggggtcgg tggtgccaaa agccaaggtc 60
atttgcacat attccatcaa cctgtcaaga atggggcctg agtttataac ccaaggcatg 120
gaagtgcatg cattctctta gctgggcaaa caattatact gtagttgtga tacaacacat 180
gtggctttta tttgtactgc acatatccac tgtacagcca cttgggagta tcgtggttag 240
cttgcagcaa ctgctgtctg catttatact gtttattgca tattcttttc cctggaagtg 300
aaagagaaat gtttttcttg ttgcattgat tacattttat aaatttgctt agctggaaag 360
tttgggaaaa gaggcctgtt tgtcaattgt acaaccgatt gtgaagctct agtgtgaata 420

tttt 424

<210> 113
<211> 414
<212> DNA
<213> Homo sapiens

<400> 113
cgttgctgtc gaaaaataca aaaattagct gggcgtggtg gcacatgcct gtaattccag 60
ctacttggga ggcgaagcag aagaattgtt cgagcccagg aggtggaggt tgcaatgagc 120
caagatcgtg ctactgcact ccagcctggg tgacagagcc agactgtttc aaaaaaaaaa 180
aaaaaaggta aaaaaccttt ttttttatt tttttaaggg gaaaagaaac ctttttttta 240
cctttcattt tcctttcgga aaaattcatt taacaaaaag ggggcccaaa atggccccaa 300
ccttttaaac cctttcaatt tgggcaaggt ttttaaaaac caaaaaaaaa gggaattggc 360
cctccaaaaa aaaaataaaa taccccaaaa agggggggcat ggtttaaaat attc 414

<210> 114
<211> 415
<212> DNA
<213> Homo sapiens

<400> 114
cgttgctgtc ggaagaattc gcggccgcgc gacagcaacg gtttcaagat tcacctcctc 60
tcaccaaata tttaactacc tgctgaatac gcctctgtac taggcacata atggaactaa 120
aaaatgctca tgtccagttt ttgtgttgag tgaacaatgc tgcagaccct aataagattg 180
ggtacagatc ggcatgcgcc tgtagtccca gctactcagg agaattgctt gaacctagga 240
ggtggaggtt gcagtgagcc gagatcgtgc cactgcactc cagtctgggc aacagagcga 300
gactccatct cagaaaaaaa gaaaaaaaga ctgggtacag atgtgatatt ggaagaaaaa 360
gatcaagctg atgaggttag gatacccagg ccctttggac ttaaagatca ctagt 415

<210> 115
<211> 361
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(361)
<223> n = A,T,C or G

<400> 115
gagcagactg aacaaatgat gtgagaatct cttcagttcc aaccaagtgg cgggaaccag 60
ctaagagttg ggtactgctg aggaaaattg atgggcagtt ggtaaaatag gtgtgaatga 120
gagaaagctt tgttggggaa ccatggtggg tatgtgggca cgttctacat tactacaagt 180
attgggaatt tcccagggga acagcaaaat cttgtcttat ttatgtttaa ttttaaaaaa 240
ttcccactgg gtgcagtggc tcacgcctgt aatcccagca ctttgggagg ctgaggcagg 300
cagatcacga ggtcaggaga tcgagaccat cctggctaac acggtgaaac cccgtctgta 360
n 361

<210> 116
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(386)

<223> n = A,T,C or G

<400> 116
gggtaacctg gagacattca gaaaatatcc gtggaactcc tgcattttgt gaggcactgc 60
ccacggcatt ggagagagag atgccttttg ggtggtccta aaagagttca cagtctggcc 120
aggagacatt gtacaaacag actataaatg gctgtgcttc ttttttttct aaagaatgtt 180
cagcgggagc acttgggacc tacctgtgag agctgaggaa ggcttcacag aagaggtctt 240
gcttaagagg aaacatttgg ggccaggtgc agaggctaat tttttgtatt ttcttcttag 300
cagagatgcg gtcnctcgct ttttcggac cattttcaac ccttcactna aagggtgctc 360
ctggagaggg atctttttgt gccgtg 386

<210> 117
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(386)
<223> n = A,T,C or G

<400> 117
agtgcagtga tacaatcatg attcactgca gcctcaacct cctaggttca aactatcctc 60
taacctcagc ctcctgagga gctgagacta caggtatgta ccactatgcc tggctgtttt 120
tttaattttt tgtagagatg gggtctcact atgttgccta agctgttctt gaacacctgg 180
gctcaagtga tcctcctacc ttggcctcct aaagngctgg aattacaggc atgagccctt 240
gtgcccaggg tctggaattc tttagagaaa tccttcatct gtcttaatag aaaaccatgc 300
cttattaggt tactcacctt tatatcaaaa tttttcctgg gtgggtgcag acgctatatc 360
tttgggaaca agaagtcctt tataaa 386

<210> 118
<211> 385
<212> DNA
<213> Homo sapiens

<400> 118
gggactcttg ctaaaggcca gccatggact tacacttaca aagcatcacc ttatcaaagg 60
tggaggaaga tcaacttgat atcaagggtg accagatttc agggaatagg gattctcact 120
aaactgactc ccagaggtct cttttagcaa ggcactcatg ccaagcgcag tggctcatgc 180
ctgtaatccc aacactttgg gaggctaagg caggtggatc gtctgaggtc tggagttcga 240
gaccggcctg gacaacatag tgaaacccag tctctactaa taaaaaaaaa aaatgggccg 300
tcacattggc tcaggcctat aatcccaaca ctttgggagg ccgaggtggg tggatcacct 360
gagggcaaaa gtttgagacc cgccc 385

<210> 119
<211> 386
<212> DNA
<213> Homo sapiens

<400> 119
tattaataat gctaaacact taccagcttt gtaactttag ctatctatca ccattgagtt 60
gtttcctaat ctataaaatg gtggtaatcc ctcatacgac tgtggaactg atgaaataat 120
atggcatatg taaacatttg gttcaagacc tgctacattg gatgaggaat gtcaacagta 180
aagtaaaatt ttgatctttg agtgtgtagt gagcttgtta tgtcactttc tgtggattct 240
atttgacact cataaagaaa aactctaggt ttaaaaatgg aactaggcca ggcgcagtgg 300
ctcacaccta taaccccagc actttgggag gctgaggcag gcagatggct tgagcccagg 360
agttcaagac caacctggga aacatg 386

<210> 120
<211> 383
<212> DNA
<213> Homo sapiens

<400> 120
tatttactac ctggtcattt ataaagaaca gaaattgatt tttcacagtt ctgcaggctg 60
gaaatccaag atgaagtcac ctgtagttca gtgtctgcgt ctaagagagt actttgttgc 120
tgcacccgcc agagggaaga aatactgtat cttctcatga aggaaggaac cgaaggtggg 180
aatagggacc aaactccctc tttcaagcct ttttgtagtg acattaattc atttatgagg 240
atgccaccat catgacataa tcatttccca aaggatttca cctcctccca ctgttgcatt 300
ggggattaat tttccaacac atgaattttg agggacacat tcacaccata tgcactggta 360
tatagtaact aggtggcccg atg 383

<210> 121
<211> 410
<212> DNA
<213> Homo sapiens

<400> 121
ctgttgccca ggctggagtg cagtggtgca atctcggctc actgcaagct ctgcttccca 60
ggttcacgcc attctcctgg ctcagcctcc caagtagctg ggactacagg cacccgccac 120
agtgcctggc taatttttg tatttttagt agagacaggg tttcaccatg tgagccagga 180
tggtctcaat ctcctgacct tgtgaaccac ccgtctcggc ctcccaaagt gctgggatta 240
caggtgtgag ccaccacgcc tggcccatga accaagtgtt tttaaggaaa caaaactatt 300
tttttaatca tcagatttat actagctata tggatattag catatctggt aattatgaat 360
ctagaatttt tttacatatt tttataatac tggtagctca ggtattggag 410

<210> 122
<211> 410
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(410)
<223> n = A,T,C or G

<400> 122
cgttgctgtc gaaaggacaa aaccctgact cccagtgagt ctgaggccaa agctgaaaac 60
agaacccaag aagcttaatt cctgacctca gttccaatca aacagcacga attgtggtgg 120
acctccagct gtgctcagat ggggggacac aatattggca gtaccctctt ccttgccctc 180
caggctgagt gccagtgtgg gagcgtgctc atgagagccc tgcacaagcg ggttttgagc 240
acatgctacg ctctagcccc gtggaagcct ggactagtta gaggcagaga acagctcagg 300
acagacacct ccctgcagag ccaaacagag tgcagcgcct gcctcgctgg gccatcctga 360
gagctggggc cttcccagga aagagggagc tcggnggggca ccaccccatc 410

<210> 123
<211> 416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(416)
<223> n = A,T,C or G

<400> 123
tacggctgcg tgaattatac agaagggtgc aatgttttgg agggggagaa gtatttcaca 60
cacataagta tgattttccc caaccagacc acaagctctt caaggttaac aacaccctag 120
cccaaccccc tccccctcag acaattcttc tgctctccta gagcagactt tgatctagat 180
tggatctaaa ttgactcgaa atgtcaggaa gaagagatta atgcacatgg tccctttctc 240
tgagagaagg agtgatagag caaagcttaa gcctgggagg gagatgaagc tgcccagcac 300
tctcttcacc ccgtctgggg cttcgaagcg ggacaggtgg aacactagag acagctggct 360
gcctggtccc gagctccatg tgaacagcct cctcccaaat cttcctttgg atctgn 416

<210> 124
<211> 382
<212> DNA
<213> Homo sapiens

<400> 124
cgtctgtcca tctgtcgtcc ctgccagcac agggggatgg tcctggctct aggggctgca 60
gaacacagca aggcccagag gccagaggct gcaggcgggc ctgagggtga acttcccccc 120
gagaaagagt ctctggaaga gaatgaatcg cccagcaggt agtgagaact ctgtcactag 180
ggtatataag ccgggatgga cacagggaag gacatttctg catcagtggt gggtccccat 240
cagttaagag agcctgtgac tctgtcgacg gaccatgggg ggtggcacca gagcccaggg 300
cacctgaggg cctgtctgga tgcagctgct agtggtcata ggacagcaaa cactattcat 360
tggattctga cttaggcagg ta 382

<210> 125
<211> 382
<212> DNA
<213> Homo sapiens

<400> 125
tgatccaccc gcctcagcct cccaaagtgc tgggactata gacatgagcc accaaacttg 60
gctagaaatt ttctcttttt tcccttagac ggagtcttgc tctgtcaccc aggctggagt 120
gcagtggcgg aatctcgact cactggaatc tatgactccc aagatcaaga gagtttccta 180
cctaagactc acgagcaact gggattacag acgcctgaca gcatcgcctg gctaaagatt 240
atattaatgg tcgagatgcg ggaatatact gaaggttacg ccggcgacaa gactacttaa 300
tggggcggag gggagaatac gacttaaacg gtcccgcttg gacaagacga ggaaaagcct 360
ctatttgcga gaacaaaaga at 382

<210> 126
<211> 411
<212> DNA
<213> Homo sapiens

<400> 126
caataaccat gtggagaagc tgtgacattt ttaatttaca acctttctgg ggctcagaca 60
taaagttacc tatccaaggt tgcagttgcg tagtggtggg accaggatgg acaactcatt 120
ggccctgcct caaaagccat acctcttctc ctgctatgca gaatctgttt ctcctgaatc 180
tctgtgatgc tggtgggaat tgtttgcata gaggaaggac aataaccctg ccatcgtgag 240
ttaatgtccg ggctggtcac agtggttcat gcctgtaatc ccagcacttt gggagtccaa 300
ggcaggcata tcatttgagg tcaggagttt aagaccagcc tggctaacat agtgagaccc 360
tgtttctact aaaaatacaa aaataagcca ggtgtggtgg tgcatgactg t 411

<210> 127
<211> 412
<212> DNA
<213> Homo sapiens

<400> 127
cgttgctgtc ggaaaactac aaagcagcag ttaacagatc aaggaaatgg taaatgtata 60
gactttatga ataatatcca tgttgaaaac gaatctttgg ataactttct aaaagaaaca 120
aacaaagaga acttgctcga tatcttaaca gaacctgaga ggaagccaga tcctaaatta 180
tataccagaa gtaagccaaa gactgactct tataatcaaa ccaagaacag tttagttcct 240
aaacaagcct tgggcaaaag ttcagttaat agtgctgttc tgaaagatag ggttaataaa 300
caatttgttg gagaaacaca aagcaggact ttcccagtaa aatcacagca actctctaga 360
ggagcagatc ttgcaagacc aggagtaaaa ccctcaagga cggttccctc tc 412

<210> 128
<211> 373
<212> DNA
<213> Homo sapiens

<400> 128
aaagcatcaa aacctttttct ttaatcccaa agttactaaa gtgatttaat acatttgata 60
ataccataat actgccatta tctttaatct ctctccaact tcctgccata aatcattttc 120
tcagagtgga cctcaattta gggtagaatt gctagttaca tagatgatgt caattgggaa 180
atacaaaaaa attagccggg cgtggtggca ggtacctcta gtcccagcta ctcgggaggc 240
tgaagcagga gaatggcgtg aacctgggag gccgagcttg cagtgagctg agatcgcgcc 300
attgcactcc agcctgggca acagagcgag actcccgtct caaaatagat acctgatttc 360
tttttgactt caa 373

<210> 129
<211> 401
<212> DNA
<213> Homo sapiens

<400> 129
cgttgctgtc gccagcaccc tggcatgtta atagttgttg aaagatctct gaataaggga 60
gtgtggttgg ctctctcaat tgcaatacca atgggaccac cacggtttta tctggttaac 120
agcttcacag atccagaatt ttatgtaatt tgtctgtgta tccagaattg atcatattcc 180
ggagtctgac tcatggtaac ccagctgtca gtagactgat gcgtaagcca ggtgcaaatt 240
tgtttacttt actattgaag tagataccct tccaatgact gaaatcccat atttaggata 300
ccccattcct gctatggaaa tacttaggag actaaattgt gaatcaaagt ttgtgactgt 360
gaggccgagt gcagtggctc acacctgtaa tcccagcact t 401

<210> 130
<211> 374
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(374)
<223> n = A,T,C or G

<400> 130
gcactccagc ctgggcaaca agagcgaaac tccatctcaa aaaaaaagaa aaatgaacaa 60
taaaataatg gtgggctgtt cgggtgaggg tagtgggtac tctggggctc tgccagagag 120
taaggactga gaccctcttt caacatctga gttcctcttc atgaattgcc ctcagaaggg 180
tggccagggc cgggcgcggt ggctcacacc tgtaatccca acactaggag gccgaggtgg 240
gcggatcaca atgtcaggag atcgagacca tcctggctaa catggtgaaa ctcntgtttc 300
actannaata caaaaaatag gccaggcgca gtggctcacg cctgtaatcc agcacttttg 360
gaggnccgag cggg 374

<210> 131

<211> 239
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(239)
<223> n = A,T,C or G

<400> 131
ctttataaaa tgtctccatc tttataaccc aagacatctc tctataatcc aaagtttcat 60
tctcctttga aatctcaaca tatatatttt cagaaggaaa ctacttgtag gtggtctgtc 120
actattatct gtcataattt aacttctaga cttgttgata agttcagatt ccaagtttta 180
gtacgattta ctaaaaaaaa acctagcatg cagaaacaaa aatattttct ctacagctn 239

<210> 132
<211> 372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(372)
<223> n = A,T,C or G

<400> 132
gttggacaag attttatgta gtctatgcag ccacttggta ataaagaaag cagcaaaagt 60
ggtagtcagc aatttgggcc aactatctta cttttctgct ctcttccaac agctctgcta 120
gatgcaagtg acagaaaatt aatgaactct tgcaggaatt ctatcccaac ctctggaatt 180
caagaatgtc ctctattttg gctagttaga attgttagag tcattctcca tggaaaatga 240
cttgattcat agttattcta ttattaagaa aacaatggct ggctgggtgc ggtggctcac 300
gcctgtaatc ccagcacttt gggaggcaga ggtgggcgga tcacgaggtc aggagatcga 360
gaccatcctg gn 372

<210> 133
<211> 399
<212> DNA
<213> Homo sapiens

<400> 133
gccttctgtt actttgtgtc ccattagtac ctgcctctat gccttaccat tttgagcaga 60
tccttgagtg ggatgatacg tgcaaaactg tgctttaggc agtttgttgt tataggcacc 120
tgctctctac tctgtttgct ctcaacttag taggtggagc agcaattttc ctttttggt 180
atatggaata ttctggtaac ttttttgcaa ctttaagaaa tttcaagcca ggtgcagtgg 240
ctcacatctg taatcccagc actttgggag gccgaggcag gtggatcacc tgaggtcagg 300
agttcaagac cagcctggcc aacatggtga aaccccatcc ctactaaata caaaaaaaat 360
tagctgggcg tggtggcaca ttcctgtaat cccagctac 399

<210> 134
<211> 208
<212> DNA
<213> Homo sapiens

<400> 134
tccctgaagt catggactgt gccagtcttg tccactcctg tgtccccagg tcctgtcaca 60
aggcctggca tgtggtagat ttaaagtgga ttcgttattg cgcacacagc tgttcactcc 120
tgattttcca gtacctcttc tgtgtcagga gctcttttat gtaaagcttg agatcacagg 180

aacccgctgg ttaacagggt tgtatccc 208

<210> 135
<211> 372
<212> DNA
<213> Homo sapiens

<400> 135
actgtacacc agtggttctc ttcaccaact ataatgccta attttcccgt taatttccta 60
cttctggtta ctgtaaacaa agtaaatccc tcattcccta cagctgggcc acaaaaccca 120
ggatagaccc ttgtaatctc tgtgatccct ggatgttcac atgagctctt gactgatgcc 180
cacttcctgc atgttggtca acatttacc tggatccttt ggaaggaagg gaaacaaaaa 240
ggatcagcaa tatgaacctc ttaatttgag taaatgctaa tcaaacccaa taacaggccg 300
ggcatggtgg ttcacgcctg taatcccaac actttgtgag gctgaggtgg gtggatcacc 360
cgaggtcagg ag 372

<210> 136
<211> 371
<212> DNA
<213> Homo sapiens

<400> 136
ggattgtgcc tgcactgaat aaaaacaagc agctccaact tctcagggct gctctctggc 60
cactagagcc aggcagtcac ctagctgctg ttatgctgca tacctgtctc tgagtactcg 120
cttcatccat cggccagggt ctgtgggaca gaccaggcag gtggtgcccc atgtgaggaa 180
cgctgcaatg gattgcaagg gaacccctga aaacaaatgt gaagcgactg agcattgtta 240
tccttataac accaggacct aatgagctat agcgcctcgg atggtattct ttcgtcctca 300
cactttgaat gctttttgtc ccctcccccc atcaaaaacc aggggggtggg gtctctcacc 360
agctcgcccc g 371

<210> 137
<211> 402
<212> DNA
<213> Homo sapiens

<400> 137
ggcacgagaa aaagagagat aatctctaaa attttgtgag ttttctgata cttaactgtc 60
aaaatacagc agatatctca agtttcctca gttgtaaaat ggacttattg aaacttgcag 120
agtttttcta caaatttaaa atatcttatg tgtacagaaa gggaaaaata gtaacattac 180
cagggagaaa cccagtaaac atcactttag gcaagtgatc aaagttgaca tcacctgtaa 240
taaaacctat caatatcatg tgcccccaaa tatggtttga ggaggtagcc atgtcacatc 300
tgtgacagtc ttcccctaaa tccataacct cagtctaatc atgtgaaaaa tatcagagaa 360
acccacattt agggtcattc tacaaaaacc tgacgagtac tt 402

<210> 138
<211> 405
<212> DNA
<213> Homo sapiens

<400> 138
cgttgctgtc gcaaactttg ggtttattta taacgaaaca caggagaagg tttcagcagt 60
tgccccgagc tgttttgtgc gtaatgaact ggctctttga ttaaggagct ctatttctta 120
tttaactgat atcccactgc cccactccac agaataggaa aatgaacaaa tctttctctc 180
tgacttgttt acatcatttc acggaaacac atctttgttt gcaatgcagt attctttctc 240
tgtgctcgac agagatgggg aggggcacac gaacttaaga ggctctagaa caaacgctat 300
gctgattatg acttggttcc acttctcgca cagtgctagt cttaagtgtc taccacacct 360
aaaggtaaaa ccccccctcct tttagcctaa ggggaggggg ggacg 405

<210> 139
<211> 398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(398)
<223> n = A,T,C or G

<400> 139
ggcacgagga accttgctac aggtagaagg gatgttaaag acttggtttc cacaaatagc 60
tgcccagaag tcatcattgg gtggtggcaa gcatcagctg accaagcatt ttccaagcca 120
ccacagtgat tcagctgctt cctctcctgc atctcctatg gaaaagatgg accagacaca 180
gctaggacat ctagctttaa aaccaaagca gccttggcac ctcacacaat ggccagctat 240
gaacctcacc tggatccaca ccactccaat ttgcaacccc cctctcagct ccccaggtac 300
tatctccttt agccatggtc ctttaggcac tggaaccggc attggcgtca ttcttttcct 360
ccagcatgga gtgcaaccct tcacccactc tgccccan 398

<210> 140
<211> 402
<212> DNA
<213> Homo sapiens

<400> 140
ggcacgaggt tgactgcaga gtgaaacatc cttgcaaact cttcccacct ccttcacgac 60
actgagttgc catgtgaggt tcttcaagtc tgagagtgga agggatccct atggagactc 120
ctattaaacc cctattagag gaagagattg agagacctag caatgtgaag taacaaagat 180
caggcagctg caagtgactc ctgaatcttg agtccagggc tttcgccact acagtacagt 240
ggttttcttt tctttggtcg gggagagtgg gctggaatgg agagtgaggc ccacaaatta 300
cctgcagaga cgtggaggcg tgagggagaa catgcttgtt aaatatgcag gtagattagg 360
agacaccaaa cagagattca gacacagtaa ggctgggatg ag 402

<210> 141
<211> 399
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(399)
<223> n = A,T,C or G

<400> 141
cgttgctgtc ggtaagctaa caaacaatcg aggcacatac acacacacac atatatatat 60
tttttccttc aatgcaatga atattttatt gagcatctta tgtgggcaag gcactctatt 120
tgtgaaaaat tcaaaagatc acctgcccct aggaatcctc tggtcaactg tacgagaaga 180
aggaaggggg caaggtgaga caagtaagca aataattatg gacttgactt ctgggcagaa 240
gctatcacag ctacatttgt taattgctca gttaagtgac ctttgaaatg ttctatagcc 300
atgtctccat taagaatatg aaatacggcc gggcgcggtg gctcacgcct gtaatcccag 360
cactttggga ccccgaggga ggtggatcat ttgaggtcn 399

<210> 142
<211> 317
<212> DNA
<213> Homo sapiens

<400> 142
cagagtttgc agtgagctga gatcgcacca ctgcactcca gcctgggcaa cagagcgaga 60
cgtcgccaaa ttaaaaaaac caaaaaaaaa agggggggag ccttttttctt ttttttcccc 120
aacttggaaa aatcttttt tgtgtggggc ccccccccc ctggaggggg ggggaaaaaa 180
ccccttttt ggaaaatttt gggcccctt tttttttggg ggacccatta aatcccccaa 240
aaaaaaagta aaacaccccc ttggtttttt ttttttatttc cgggccgggg gggggggggg 300
ggggttgttt tccaccc 317

<210> 143
<211> 406
<212> DNA
<213> Homo sapiens

<400> 143
gccgttgctg tcggcctgta atcccattta cttgggaggc tgaggcagga gaatcgcttg 60
agcccgggag gcggaggttg cagtgagctg acatcgtgcc actgcactct agtctgggtg 120
acagagcaag actccatctc aaaaaaaaaa aaaaaaaaat tttggaaacc taggggttta 180
aaaaaaaaca aaaacatttt tcattttgcg gggtggaacc cccaaaaaaa acccccattt 240
aaagccaccc ttttttaag ggggaaggtc ccaaaaaaaa ggtgggcccc cgcccttgta 300
ccggataaaa ctcccaaaag ccccccccaaa aaacatcccc ttgggggggg ggacttaacc 360
cgggggttt tgggggagaa tggttaagcc ccaaaagggg gcctaa 406

<210> 144
<211> 398
<212> DNA
<213> Homo sapiens

<400> 144
cgttgctgtc gggccccagg tggggagatg actccaggag gggacctgcc aaggacctgg 60
gcagccagcc acgtgttctg tgccctgcca ctgccagctc caaactcaca gtgtcatggt 120
ggtgggttgt tgggaaaacg tcctctgctc atacttctga catcagttgt gtgggtattt 180
tcacaccaaa caattcttca acttctggaa acgaattggg tatccaagga ttccattcag 240
cattgaacag aattgccagt gctgacacta caggagttag tacagacccc acagattaag 300
ggctcagtcc cataagactg cccccacttc agatgccagt cacaacttcc aggggctgcc 360
catacttctg ttccctcagc gcctctgcag atgtgagc 398

<210> 145
<211> 402
<212> DNA
<213> Homo sapiens

<400> 145
ggcacgagca cagtatgaac tactgctgat gtctctgttg gggatcagag ggctggcggg 60
aacgcgagaa gggcaccagc agcattccac acccagctct tcctcacctt cctgtctagt 120
ttgaatttct ttttttctt tttcttttt ttttttttaa attaaaaagg aaaaaggggg 180
ggtggggaaa aaacctaaac caaaaaaggg gcataagggc taaaaccacc cccagaaagg 240
ggcccttgtt tgggggaaca agggctttgt taacccccct tgttttggtt ttgcacaagg 300
tgggccctgc ttaattttca ggggcctatg ccccattttt ggccctgggg ggctcggggc 360
taaggctcca cagggctgaa agtcccctgc caggttttag gg 402

<210> 146
<211> 406
<212> DNA
<213> Homo sapiens

<400> 146

ggcacgagcc ccaccctgct gccttatttg tacccagggc tttgacacaa acccagtgct 60
ttgcttatgg gtgctcgctg gggtccggtg gagactgacc accctgcttg agccaaagac 120
aaggtgatga gagatgggga gaggccattg gctcccagag ggaacagcgc tggctgtggc 180
tagagaacag caggtctgtg cagtgtctga gggcaggttg ggaagggtag cagagagaga 240
gagacagaaa gagagagaga gagagagaga gagagagaga gagagagaga gactctcaga 300
gtggaatggg ggggacgcat ctagacacat tggctagtca cgcatgaagg agggagaagt 360
acaggggata ttataatggt tttccccggg ggagccttag gaatcg 406

<210> 147
<211> 372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(372)
<223> n = A,T,C or G

<400> 147
gccggctctg ccttttaact gcttttcact ggtctgaggt gtatctgtat aaatgggagt 60
catagggttg ttgagattaa aaacaaaaat actcgcttgt aaaaacacag tgctgggcct 120
acactaaatg tcccagaaat gtccttcctt tgcttccttc cactgggggg gtctatatca 180
tgagcccagt ggtatggtat acccagggcc accctcctgt cttcctgctt gtccacccag 240
agccggcttc ttccatggca ggacctgcaa atgctggact cacagaaggc tctgagaagt 300
aaataacagg tgaggctggg ggtgccttct tatttcttgg ngttgtcccc agtctgttaa 360
gagacagtct aa 372

<210> 148
<211> 401
<212> DNA
<213> Homo sapiens

<400> 148
acccatcgat tcgaattccg ctgctgtcga ggaaatggta aatgtatata ctttatgaat 60
aatatccatg ttgaaaacga atctttggat aactttctaa aagaaacaaa caaagagaac 120
ttgctcgata tcttaacaga acctgagagg aagccagatc ctaaattata taccagaagt 180
aagccaaaga ctgactctta taatcaaacc aagaacagtt tagttcctaa acaagccttg 240
ggcaaaagtt cagttaatag tgctgttctg aaagataggg ttaataaaca atttggtgga 300
gaaacacaaa gcaggacttt cccagtataa tcacagcaac tctctagagg agcagatctt 360
gcaagaccat gagtaaaacc ctcaaggacg gttccctttc g 401

<210> 149
<211> 398
<212> DNA
<213> Homo sapiens

<400> 149
ggcacgagga gccatgcgag cagctcgttc ccttggagaa agaactgtaa cagaactgat 60
attacagcac cagaaccctc agcagttgtc tgccaatcta tgggccgctg tcagggctcg 120
aggatgccag tttttagggc cagctatgca agaagaggcc ttgaagctgg tgttactggc 180
attagaagat ggttctgccc tctcaaggaa agttctggta ctttttgttg tgcagagact 240
agaaccaaga tttcctcagg catcaaaaac aagtattggt catgttgtgc aactactgta 300
tcgagcttct tgttttaagg ttaccaaaag agatgaagac tcttccctaa tgcagctgaa 360
ggaggaattt cggagttatg aagcattacg caaagaag 398

<210> 150
<211> 368

<212> DNA
<213> Homo sapiens

<400> 150
ccaggctggt cttgaactcc tgacctcagg ttatctgccc accttggcct cccaaagtgc 60
tgggattaca ggtgtgagcc actgcaccca gcctccttta ctgttcttta atttttaaaa 120
tgtactggag ttttctcttc catgtaaatg ttagaatcag cttaagttgt attaaaaata 180
cctcattggg attttgtttg ggattacatt ttaattgtag atttaaactt tcctatgtaa 240
ccaacgtaat gtgggccctg ttttggtgtt ttttatacct tgaagcgatt atagcttaat 300
ctttccggcc cgtcactgtg ggttactctc tgtattggca attatatttt tttttctaat 360
gaaaaaag 368

<210> 151
<211> 369
<212> DNA
<213> Homo sapiens

<400> 151
atactgaagg taatagggca ggctggttcc atcagggctg agaggcctgc tgaagatcct 60
tccacaagag ctgttccttg agtctgtgta gacagttgga aattaaagtg agagaggaga 120
aggaataatg aaggaggctg ccatttaaaa atgtcttgcc tgaaaactag gccgggagcg 180
gtggctcacg cctgtaatcc caacattttg ggaggccgag gcgggcggat cacttgaggt 240
caggagtcga gaccagcctg gccaacatgg cgaaaccccg tctttactaa aaatacaaaa 300
attagcagga cgtggcacac atctgtaatc ccagctactc aggaagctga ggcatgagag 360
tccgttgaa 369

<210> 152
<211> 364
<212> DNA
<213> Homo sapiens

<400> 152
agagaggtga ggacagagac agctttattc agcagggacc gcagaggccc cggagggctt 60
cgtccaggga gctggggaga gaggaggagt cagagacagg agagacagac agagatggag 120
agaaatgggg ggagagacag agacagaaat gggggtagag acagagacag agagaaatgg 180
tgggagagag gcagagagaa gtgggggaca gtcagagata gaaatgggga agagacagag 240
atagaagtgg gggagaggca gagacagaga gaagtatagg agagacagag atagaagtgg 300
agacagagac agagaagtgg gggagagaga gatagaaatg ggggacagac agaagttttt 360
atag 364

<210> 153
<211> 363
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(363)
<223> n = A,T,C or G

<400> 153
attagtgtta tgaaacgaag catcacactg ctgcacacat aggaggcatc ttgtcgttct 60
tatgctattg accaaagaag gttctcttct cttgtatagg ccattctatt tggccacggc 120
aagatgtcta ttaattatat gagcaaggat aggaaaccct cccagcccac cgtggcagac 180
aatttagccc tgcggatcaa tgggataaca gatgtctcag cctgaactct ttcacagcag 240
agcatttttc cattcttgtt gtggacttca gtgtgagcac tgtgagagca ggaactgagt 300
cttattcgtc tttgggtcac tagcacagag gctagcattt ggatggaggt cactgctctt 360

atn 363

<210> 154
<211> 343
<212> DNA
<213> Homo sapiens

<400> 154
tctactgaaa atacaaaaat ttgccaggtg tggtagtgca cgcatgtagt cctagctact 60
cgggaggctg aggcaagaga gtcacttgaa cccgggaggc agaggttgca gtgaactgag 120
attgtgccac tgcactccag cctggccagg tgacagagca tgacttcttc tcaaaaaaaa 180
aaaagaaagg aactataaaa ttgggggggg gggggaggt gaccccgcgg ggggccactt 240
agggggttta agaggtttcc tttgggggaa gggaacttaa tttaattttt gaggggaaaa 300
tgagaagccc agggggtccg cccagaacgg gtaaaaattg ggt 343

<210> 155
<211> 147
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(147)
<223> n = A,T,C or G

<400> 155
cctaattgac gtttatactt aaaattcaga gtacattaca aggacttctg gttgttgagc 60
ttttaagaat tatacagcag aatctttttc atctggnttt atgagttgct gcaataggat 120
aaagctattg taaattaatg ggaactn 147

<210> 156
<211> 285
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(285)
<223> n = A,T,C or G

<400> 156
gaccatacat cattttccat tctgggacag aggaagaaga cgggtggggg agttgatctg 60
gctagcccag agctggacag tgccattcta ttcttccctc ccacttgtct acacggtggt 120
tattactact tgctctgctg cccaggctgg agtgcagtgg tgcgatctcg gctcactgca 180
acctctgctt cccagcttca agcaattctt ctgcctcagg ctcccaagta gcaggcatta 240
caggcgcctg ccaccacgcc cagctaattt tctgtatttg tggtn 285

<210> 157
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(389)
<223> n = A,T,C or G

<400> 157
tacggctgct agaagactac agaaaggttc tagagcacgc aacctagatc cctcacatgt 60
gcagttcaca atagggttca cactcctatg acaacctaat gctgccgctg atctcacagg 120
aggcggaact caggtgggta atgctcgctg gcccaccgtt cgcatcctgt tgcacagtcc 180
agttcctaac aggccacgga ccagctgacg acccctgctc tagagaatcg ccaaatgtga 240
gggtggtcat gaaagtttca aacaggtgtt aaaggcaaag cgatatacta gaatcatcac 300
tgcatttta nagagcacta ttaggaagag ctctcatctt tctctcttga tcaaagtgcc 360
tttgaaacaa agagacttgc atctagaag 389

<210> 158
<211> 391
<212> DNA
<213> Homo sapiens

<400> 158
ggcacgaggt cacccaggct gttttgtttt ggcgtgatct gcaacctctg ccccccgggg 60
tcaagcgatt ctcctgcctc agcctcccga gtagctgaga ttacaggtgc gcgccaccac 120
acttggctaa tttttgtatt attagtagag acggggtttc agcatgttgg ctaggccggt 180
ctctcctgac ctcagggtga tcagcccacc tcggtctcac aaagtgctgg gattacaggc 240
gtgagccacc ttgcccagcc cacatcatac agtttgaaat gaaactttgc cacaaccagc 300
ctttgctgta gcacacacat atatcactga acctgtttga aataaaggat tttttgtttt 360
tcatgactcg gctttgagta cctccacgcc g 391

<210> 159
<211> 361
<212> DNA
<213> Homo sapiens

<400> 159
gtgctctgtg acccgagcta gaaggcagtg gcatgacctg actataggtc actgcagcct 60
ctaactcccg ggctcaaaca aatctctccc ctcagcctcc caagtagctg ggaatacagg 120
tgtgagccac tgtgtccagc ccttaacttc tccttttat cagagtgtaa ccaaaggtgt 180
cctgaacact gagccctcca gggtctcctc tcatttcctc ctgggctcgc ttgcatacca 240
cggttgcaag cataccatgt ctgatgggag ggcccagagg tgaccatgct ggaagggaca 300
ccagggctct gcagggtctt agtgtcagag gtcactgact ttcttaagca cctggcatct 360
g 361

<210> 160
<211> 394
<212> DNA
<213> Homo sapiens

<400> 160
cgttgctgtc gggcacggga aaataaatag tctttcgcgt gtggcagggt aaccttgtgc 60
tcagggaggt ccgggaacct ggacgatttc agtctgtcct gctcccctcc ccatgacaca 120
tacagcggca ctcgtgcgct caccatagac cggcggtcat atccgcacac agccacggcc 180
ctcgaggtgc agtgcgaggc ctcaggtgcc agagggcaca cccctggcag ctctatttat 240
ttattgagac ggagtttcac tcttgtcgcc caggctgtag tgtagtggtg cgatctcggc 300
tcactgcagc ctctgcctcc caggttcaag cgattcttcc gccttagcct cctgaatagc 360
tgggactaca ggcatgcacc accacacccg gctg 394

<210> 161
<211> 391
<212> DNA
<213> Homo sapiens

<400> 161

ggcacgaggg aattaccccc cttgctcttg gggggctgct agactgtctt gccgcgggga 60
gggatgttga ctgcagagtg aaacatcctt gcaaactctt cccacctcct tcacgacact 120
gagttgccat gtgaggttct tcaagtctga gagtggaagg gatccctatg gagactccta 180
ttaaacccct attagaggaa gagattgaga gacctagcaa tgtgaagtaa caaagatcag 240
gcagctgcaa gtgactcctg aatcttgagt ccagggcttt cgccactaca gtacagtggt 300
tttcttttct ttggtcgggg agagtgggct ggaatggaaa gtgaggccca caaattacct 360
gcagagacgt ggaggcgtga gggagaacat g 391

<210> 162
<211> 366
<212> DNA
<213> Homo sapiens

<400> 162
taagtgacca tttcttcact cctggttttc caattgtttt gacactgaca ttcaattagg 60
aggactaaat acacagtggt gatgatggtg gtgattatat cattttatga tcaacacctt 120
cttcactgtt tgcttctccc aatattactt atgagacagg aacttacttt ttcttatggc 180
cctcaacacc ccccagttgc tcctagaacc ctatctcttt tctgatccca ttacacaatt 240
ttgaggtttt cgttcccccc cttatacttt gttttcctgc gatttttgag ggacctgggg 300
ttttttctac ctctcctttt tctcttaaat ttttttcttc taacttagac ctcccttccc 360
ttttg 366

<210> 163
<211> 394
<212> DNA
<213> Homo sapiens

<400> 163
cgttgctgtc gggcacgtgc caccacgccc ggccaatttt tgtattctta gtggagacgg 60
ggtttcgcta tgttggtcag gctggttttg aactcctgat ttccggtgat ccaccaccct 120
cggccttcca aagtgctggg attacaggcg tgagccaccg cgcctggccg gaaatcatgt 180
aatttaaaac tatatatggg tgtcttaggc ggcatcggtc ccaactctaa agtacgcgtt 240
agacgggcct gggccagaag tgggccatgg agacctcggg acccgcaggg ctgccgcccg 300
acccagcgag cctctgaagg tgcaccgcca cccccactgt ttatcttact gcctcatagt 360
aggcacattg tcgttctcaa tataattgca caca 394

<210> 164
<211> 368
<212> DNA
<213> Homo sapiens

<400> 164
cgtctgtcca tctgtcgtcc ctgccagcac agggggatgg tcctggctct aggggctgca 60
gaacacagca aggcccagag gccagaggct gcaggcgggc ctgagggtga acttcccccc 120
gagaaagagt ctctggaaga gaatgaatgg cccagcaggt agtgagaact ctgtcactag 180
ggtatataag ccgggatgga cacagggaag gacatttctg catcagtggt gggtccccat 240
cagttaagag agcctgtgac tctgtcgagg gaccatgggg ggtggcacca gagcccaggg 300
cacctgaggg cctgtctgga tgcagctgct agtggtcata ggacagcaaa cactattcat 360
tggattct 368

<210> 165
<211> 397
<212> DNA
<213> Homo sapiens

<400> 165
cgttgctgtc gcgctcagga ggcctgagct tggtcctttt cctctctgct tggattctgg 60

accaccacct gggaccaacc ttcagctctg gaaccttcat aaagcaggtc agcgtggcct 120
gattgtccca ggacctgaag ggagcaagga tggcctcagg gcctggagaa gtctgctact 180
ctgtccttac tgctgaacat cctgcttgta tcaggaaact cagaagcagt ttgccttgtc 240
aaattcaatc tcaatggcca ttgtccacat aactgatcac ccatggctgc ctctcctatt 300
atctattatc actgaaactt agtagcctgc ttttttttt taaagctatg gcgaatcttc 360
cctgttgggg atccttgaac ctggtttgag ttttccc 397

<210> 166
<211> 314
<212> DNA
<213> Homo sapiens

<400> 166
tccagtttaa aggaacatgg gccgggcgcg gtggctcatg cctgtaatct cagcactttg 60
ggaggccgag gagggaggac cacctgactt tagaagatga agaacaacct gtgcatcatg 120
ttgctgaacc tgatctagaa aatggtggta ccacagcctc cggcttagaa catgaaaaga 180
agtgtgcaga cttacccctt acggactctt tatgagtttg ttccccctt tggagacttc 240
ccctcgctgc cttttctgcg tattataccc cccaacatct tgggtgggtc ccctcgctga 300
ccttaaaaat taaa 314

<210> 167
<211> 396
<212> DNA
<213> Homo sapiens

<400> 167
cggcggagct gtgagccggc gactcgggtc cctgaggtct ggattctttc tccgctactg 60
agacacggcg ggtaggtcca caggcagatc caactgggag ttgaagtgtg agtgagagtg 120
aagaggaacc agcaggcttc cggagggttg tgtggtcagt gactcagagt gagaaggccc 180
tcgaagtcgt cgtccctctc atgcggtgcc acgcccatgg accttcttgt ctcgtcacgg 240
ccataactag ggaggaagga gggccgagga gtggaggggc tcaggcgaag ctggggtgct 300
gttgggggta tccgagtccc agaagcacct ggaaccccga cagaagattc tggactcccc 360
agacgggacc aggagaggga cggcatgagc ggtatg 396

<210> 168
<211> 397
<212> DNA
<213> Homo sapiens

<400> 168
cgttgctgtc gggcacgtgc caccacgccc ggccaatttt tgtattctta gtggagacgg 60
ggtttcgcta tgttggtcag gctggttttg aactcctgat ttccggtgat ccaccaccct 120
cggccttcca aagtgctggg attacaggcg tgagccaccg cgcctggccg gaaatcatgt 180
aatttaaaac tatatatggg tgtcttaggc ggcatcggtc ccaactctaa agtacgcgtt 240
agacgggcct gggccagaag tgggccatgg agacctcggg acccgcaggg ctgccgcccg 300
acccagcgag cctctgaagg tgcaccgcca cccccactgt ttatcttact gcctcatagt 360
aggcacattg tcgttctcaa tataattgca cacagtt 397

<210> 169
<211> 183
<212> DNA
<213> Homo sapiens

<400> 169
ctggtacggg tcggataatc ttcgtaatgg tgccggtgtg cctcgcttat taagttgatc 60
gcttgtggaa ctatttcctt gggagcgtgt gcgaatcccc tgcgtttttt ttttgaatga 120
cgtccatttt ttttcgtgaa tgaagtgtcg ttcttctttt tcgttgtgct gtttctcatg 180

gcg 183

<210> 170
<211> 389
<212> DNA
<213> Homo sapiens

<400> 170
cgttgctgtc ggcagacaca cacatgcaga caacacgcag acacacacat gcaggcactc 60
acatgcaggc ccatgcacac acacgtgcac acacatgcag agacatgcag acacgcaggc 120
acacatgcac acatgcaaag acacgcatgc aggcacacgc agacgcacac agagacacac 180
atgcagatac acatgcacac acacatacac acactggccc ctgtttttct gtggtgtcac 240
tgggtgccag caactcggta tctcccacct cccactaaaa cctgggcctt aatttctctc 300
ccgtccccac ccctaaattc ctgatggatg aacctagagc tgtcctgtcc actccaggcc 360
ggactgacgt agcctatggg cccagcagg 389

<210> 171
<211> 396
<212> DNA
<213> Homo sapiens

<400> 171
cgttgctgtc ggcagacaca cacatgcaga caacacgcag acacacacat gcaggcactc 60
acatgcaggc ccatgcacac acacgtgcac acacatgcag agacatgcag acacgcaggc 120
acacatgcac acatgcaaag acacgcatgc aggcacacgc agacgcacac agagacacac 180
atgctgatac acatgcacac acacatacac acactggccc ctgtttttct gtggtgtcac 240
tgggtgccag caactcggta tctcccacct cccactaaaa cctgggcctt aatttctctc 300
ccgtccccac ccctaaattg ctgatggatg aacctagagc tgtcctgtgc actccaggcc 360
ggactgacgt agcctatggg cccagcaggt ccaggt 396

<210> 172
<211> 328
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 172
aaaccccgtc tctactaaaa atacaaaaaa ttagccgggc gcggtggcgg gcgcctgtag 60
tcccagatac tcgggaggct gaggcaggag aatggcgtga acccgggaag cggagcttgc 120
agtgagccga gattgcgcca ctgcagtccg cagtccggcc tgggcgacag agcgagactc 180
cgtctcnnnn nanaaaaaaa aaaaaaaaaa aaggggggag ggtttttccc ggaaacccca 240
actggaaaaa aaccttgggg ggggtgggca aacccccctt taaaggggag gaaaaaaagg 300
gttttttttg gaaaatttgg ggccccta 328

<210> 173
<211> 358
<212> DNA
<213> Homo sapiens

<400> 173
gcaggttgta cagaaagcca actaaggatg atcaaaaact ttcagatgat cttgactgtt 60
cagttgaggt ttgaaattaa aaatctatat gagcacctga ctgtataatt atgtaatttt 120
ttttccagta atataaagag ccaaggaaag caggtgggta ggtggatcca agattgagaa 180

tttgttggtg ggctgtgcct gcaagtcaaa gaactgtcct tcaagccaag agttctggag 240
gtcattcaat gggaaggctg aaggtcagat gctttgttaa gactgaagct tggtcgggca 300
cagtggctca cacttgtaat cccagcactt tgggaggctg aggcaggtgg atcacttg 358

<210> 174
<211> 300
<212> DNA
<213> Homo sapiens

<400> 174
acaagggaac tgggcaatgc cttggtgaaa ttcaaacact agaattgatc cctgaagaga 60
cagaaaccct aagcacacca tgaaaccacc ggagaaaggg aaaacgggtt gagagatcta 120
ctattttgaa aagtcaggcc tggcgcggtg gctcacgcct gtaatcccag cactttggga 180
ggcgaaggga gaatggcgtg aacccaggag gtggagctta cagtgagccg agatcacccc 240
actgcactcc agcctgggca gcagagtgag actccatctt aaaaaaaaaa aggaaaagaa 300

<210> 175
<211> 302
<212> DNA
<213> Homo sapiens

<400> 175
tagtagagac ggggtttcac tatgttggcc aggctgtctt ccaactcctg acttcatgtg 60
atctgcctgc cttggcctcc caaagtgcag ggattacagg cgtgagccac tgtgcctggt 120
cttctcattt gcttttattt gtacatcaat tttagcatgt attgctatta gccttagatc 180
ataagtaatt acaattatgt gtgtctatat cattgcatag ttgcatttgc ctgtttctct 240
tacagattgt ggcacactag gcatttttat ttcccataaa tcctagcaca gagacttgta 300
cg 302

<210> 176
<211> 325
<212> DNA
<213> Homo sapiens

<400> 176
ctctccttga ctgtaaaggc aatatcttag agtactttgt atctccagca catagcaaat 60
tgctttgcta gagtaggttt taacatatgt ttttgggtaa tggtggcgat gatgcaataa 120
aggacagccg ttattcaatt tactctgtgg cactaaggca acttgaaaac tctctgttgt 180
aacctgacat agagctttgc atatagtagg aactcagcac atgtttggta gattttaagc 240
aattattttt tttctgtttg gattagtctg ttctcacacc gctgtgaaga aatacccaag 300
actgggtaat ttataaagaa aagaa 325

<210> 177
<211> 353
<212> DNA
<213> Homo sapiens

<400> 177
atatcaaatg gatgtgccgg aaggcagggt gcggcagagg caagtcagat cagcttctgc 60
cactactgat tgtgtgactt tgaacaaata agcctgtttc cttaatgtta aagaagaaat 120
accaatagtg tccaggtcat ggtggcggca tgataattaa ataatatgtg taaggctcca 180
ggcagtcctt taccttactt ttcctgacca gtaggaaatg ttcaataata attaacggca 240
atttttctca ctttgtcaca atgattctta tgaattatct agatgagaag gtagagctga 300
ggtcatcttt cccagtgtga cattcaaact cttttcacaa tacttagaga cac 353

<210> 178
<211> 329

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(329)
<223> n = A,T,C or G

<400> 178
attgtgttct gaaaggaacc aaggttcccc agtaggctca attccaagta gctttccccc 60
caccactctg tggctcttta ttatttagga ctgtgctttt taagctcccg ttttcttagg 120
ggcattatca caccagagtt tcactgctgt ccagagttta cctctgcatg aatgtctcta 180
ggctgattgc tctctgctga gtactaacga aggaaatcca acattcatgt tctactttgg 240
gctttctgat gacacaggag cctggcttgt attcagtaca catatattga tgttatgtga 300
cttgactagg ccataanaac gataaatan 329

<210> 179
<211> 353
<212> DNA
<213> Homo sapiens

<400> 179
ccgggttact catcccatcc tatgtcttct gaagtacccc tgcaatccct aatgcctaat 60
ctctgtttgt ctggctgcct acggaatgag gacaagctga aagtctggcc tctcagtttt 120
gtctcccact gcctgactac ttttctattc tcaacccagt ccaccttcac atacccccag 180
ttgtgagtcg gtcaggagga tgtttctggt caatgagatg tacaaccggg gacagtatta 240
gcggagccat ggaagaaatg gaatttcacg cgtgaatatt ttgacaaaca tggccatgat 300
ttaagaactg gcgggatttt tctgggcccc caggtgatat tatttggccc gaa 353

<210> 180
<211> 356
<212> DNA
<213> Homo sapiens

<400> 180
gaggaaaata cttttctcta gcatcgtagg aggaagaaaa caaacacatc agatattttc 60
agcactaaaa gagatggttt tccccacata tatgtaaaag aaatttgcaa gactactgga 120
ttttgatctc atggttgcag tgggtgaata ggtggccttt tgtgatctcc ttcatcaccc 180
tggaagtgag acttcttcgg tttcttctag agtcagtttg gtatcagaat ggcaaagcaa 240
cttaaccttc cagaaaatac agatgattgg acaaaagagg atgtaaatca gtggttagaa 300
agtcataaga ttgaccaaaa acacagggaa attttgactg aacaagacgt gaatgg 356

<210> 181
<211> 352
<212> DNA
<213> Homo sapiens

<400> 181
aattagttgg tgaggaacta attataaaga ctattccagg tgctttaggg ttcagccaca 60
acctatgata aggaatacct attataagtg ggtgcttgta atagatatta ccatattatc 120
tatgcactca ctttaatact cattgttctg ggctccacct gatattatga tatgaatctt 180
tttagctata ctctgatcca gaagatcaca tgattagcat caatttctaa ggacagtaat 240
aaacttgata gttctgagca aatacataca ctacagaata gtcattcaac aaatatttat 300
tgcctgccta ctatgtagtc tatatatacc tatatgtaac acacatgcaa ag 352

<210> 182
<211> 384

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(384)
<223> n = A,T,C or G

<400> 182
cgttgctgtc gggggagtgg atgctgctga attgtgatta attgggggag ccatataggt 60
acatttggca tgatctgggc ctatgcggtc ttacaatccc tgtataaaac tagacaatga 120
aaaacagaaa acaaaacaaa caaacaaaaa aacaagaacg aagcacctac cacatgccag 180
ctactgaggc tatgaaggta ttctccggcc ttagaaagcc caggattaat gcaggattgc 240
gatatttaaa cagaacattt ccatacagca tgagtataaa tgactttccc aagtttacac 300
tgagagtaac tgacacagca accccagcaa agtctgagct gagtcctgaa taattgtata 360
aaaaggggag agaaacagag tgan 384

<210> 183
<211> 328
<212> DNA
<213> Homo sapiens

<400> 183
gaagcctccc caggcccaaa gactgggtta gagcttctcc ctcctggtgc aatgcttcat 60
taattacata accaagtcta ttatacacaa agtgtaacct cccactagag tgggagttcc 120
tcaagggact taaggtactc atcttcgtta gcctagcacg gtgctcagaa aacggtaaga 180
ataaaatagg tatttactac tcaggacata gtacagagtt attgtatatt tattgaactg 240
aattgagctg tctagtttgc cctttaaaac caggtgtttt agtatttgga aatatggaca 300
atgatacctt tggtgttcct taaattca 328

<210> 184
<211> 356
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(356)
<223> n = A,T,C or G

<400> 184
gtatatgatg ttatgttatg ttatgttatg ttatgttatt gttacagaat tctaaatggt 60
gacatagaaa ttatttccct tgagtatagt acatattgct gctaaataat agaacttgcc 120
tgattggtat ggggggtggg gtttgngaat tanngataag nnanaattat gggacattgt 180
agaattttta ttgttttcaa attaatgcaa aataatgact agccctgtat tgttgagaca 240
cagtccctta ggaggtttgc tttaatgaac agataagaat cactggtggg cgggcgcagc 300
ggcttacgtt tgtaatccca gctctttggg aggccgagtg gggcagaaca ccttga 356

<210> 185
<211> 352
<212> DNA
<213> Homo sapiens

<400> 185
gatcgcgcca ctgcactcca gcctgggcga cagagtgaga ctctgtctca acaccaccac 60
caccaccaac aaattacttg tcgtttgaag ccacccagtt tgttgtggca gccctaggaa 120
acggaaaccc acaggtgtgt ttcctaggag actgtgagtt tcacgagctc catcctccct 180

ccccctatgcc agatggccaa gttttctgct tggcgcatct cctgagccta gcactgaggt 240
gtccctcagg aactgtgccc atagactagt ctacagattg tgaagtagaa acaggtcccc 300
catgccaggc gcggtggctc acgcctgtaa tcccagcact ttgggaggcc ga 352

<210> 186
<211> 356
<212> DNA
<213> Homo sapiens

<400> 186
taatgaaaaa agtgttttta aattagcatt ttcaatggtt ttcagtctct gttaagcact 60
gaccaagata agatgaggtg aggttgcagc aaattaactt gtattgcagg cataacacag 120
aaaatctagg cctaaagaaa attagacact gagaaaagta gcggaaactg ggaaatactc 180
gtctttggaa aacactcctg gtggggtaga atttctggaa tacttttgga tgtttccttt 240
ctggttccaa ggactagatt aagtggcctc tgagtgagca ggttgggggc agagcctaaa 300
ccggggctgg gtctatgtta tctgtgtaca agcagagcag tggggtgagg agaata 356

<210> 187
<211> 355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 187
ctggggttaa gcggaaaatt aaaaattcag aacaaccata gtctgttatc tgtcacctgt 60
aatttaggct aatatctcaa ttctcttgtt atggacattt ctcttacagt gtgtctttac 120
ataatgggta ttggatgtaa tgtgatcaat taattagagc atatgattta cattagtcaa 180
acctgtattg attacaaaat gactatgatc tgaaagtanc cttgcgtgtg tgtgtgtgtg 240
tgtgtgtgtg cgtgtgtgtg tgatataaga ggagatcctg ctttgtatgt ggccaacttg 300
gggaggggga tggaattttc actatattac tgcgacgtga gcacacacct acggt 355

<210> 188
<211> 358
<212> DNA
<213> Homo sapiens

<400> 188
ttctcctgac tcagcctccc gagtagctgg gactataggc acccaccatc acgcctggct 60
aatttttttt tttttgaatt tttaagaaaa aaggggattt caccgggtta cccaggaggg 120
tctaaatccc ctgacctcat gatccaccct ctttagcctc ccaaactgcg gggattacag 180
gggggagcca ccgggcctgg cccaccagga gctatttcat agggctctgg gggccggggg 240
gttttttgga aaggggggtt ctttgattta cttggaaaat ctcacccttc aaagcggggt 300
ttaaaaacca ccccactgga attggaaaaa atttttttgaa gggccttttc gaaccctc 358

<210> 189
<211> 301
<212> DNA
<213> Homo sapiens

<400> 189
acaagggaac tgggcaatgc cttggtgaaa ttcaaacact agaattgatc cctgaagaga 60
cagaaaccct aagcacacca tgaaaccacc ggagaaaggg aaaacgggtt gagagatcta 120
ctattttgaa aagtcaggcc tggcgcggtg gctcacgcct gtaatcccag cactttggga 180

ggcgaaagga gaatggcgtg aacccatgag gtggagctta cagggagccg agatcacccc 240
actgcactcc aacctgggca gcagagtgag actccatctc acaaaaaaaa agaaaagaaa 300
g 301

<210> 190
<211> 386
<212> DNA
<213> Homo sapiens

<400> 190
cgttgctgtc gctgaaggga gcaaggatgg cctcagggcc tggtgaagtc tgctactctg 60
tccttactgc tgaacatcct gcttgtatca ggaaactcag aagcagtttg ccttgtcaaa 120
ttcaatctca atggccattg tccacataac tgatcaccca tggctgcctc tcctattatc 180
tattatcact gaaacttaat agcctgcttt ttttttttt ttttaaaag ctatggggat 240
tctcccctgt ggggaaccct tgacccggat tggggtttcc cctcctttgg gaaaattata 300
atccaaaagc ctttttttt tgtttaaatt acggaggggc atccccataa ggagtcgcct 360
ggccctcggg gggaataaca aaggaa 386

<210> 191
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(386)
<223> n = A,T,C or G

<400> 191
cgttgctgtc gaaattgtat ggagaatggt atttaaaaag tgtttggaga ctttgcagct 60
gtcctataaa atgttgaagt gtgtatgtga tctacgtaga aagaatatta aagagtaggt 120
ggagctcttt ataggcgagt acagccttaa atatgcttgt atagcatcca ctgncagaag 180
taatagttgt gcctcagact tgggggttgc atgtcgccct gggggagtta ctacccttgg 240
tatgcatgag cgggtcctat tagcatcagg gggaactcaa tactgtgtac gtatccacaa 300
aagggatctt gacacccaca ggtattctta atttctgata ttaacaaccg tacatactgc 360
tggaacttaa actaagaaca tttagg 386

<210> 192
<211> 356
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(356)
<223> n = A,T,C or G

<400> 192
aaaggtcaag ctgtgctatc actgttaccc tagttttggg cttattggat gtgtccatag 60
tgaagccaac tccaggcctg acacccaggt ttgactcgag ggtcttcatg atccctggtc 120
tgtgcactcc tgccacagga gagcggattt ataacaaaag ctggcagggt gcagtgactc 180
acacctgtaa tcccagcact ttgggaggct gaggcgggtg atcacctgag gtcaggagtt 240
tcagaccagc ctgaccaaca tggtgaaacc ctgtctctac taaaaatata aaaattagct 300
gggcatgttg gtgggtgcca gtaatcccag ctactcggga gggaggctga ggcaan 356

<210> 193
<211> 357

<212> DNA
<213> Homo sapiens

<400> 193
tgtcacccaa gctggagtgc aatggtgcga tctcagctca ctgcaacgtc tgcctcccag 60
gttcaagcga ttctggggag gggaggagga gggaagcaag gagagaggaa cgcagggagc 120
agagcctgac ctggtcacgg gggtctggga aagacagagg cttttgttag agccggcagc 180
tgagggccga ggccgagcag gggttaggcc agcacaggac gaaaaggaag aaagttccag 240
gtggagtctg gtggagaaag accgacctgg aaggcaccag catgtgcacg tggcaactga 300
ggtcgaggac gtgcctgaga aagaggagga aggtgccctg cggaccgggt agggtgc 357

<210> 194
<211> 357
<212> DNA
<213> Homo sapiens

<400> 194
ttgaacctgg gaggtggagg ttgcggtgag ccaaaatcac accactgcac tccagcctgg 60
gtgacagagc aagacttcgt acaaaaaaaa aaaacctaga aggttaaaat ttttgttatt 120
ttgacccaaa gggaaaaaac tagtttttag ggtgggcgct gcctgtgaaa actgcttttc 180
ttaaaaggcc aagttttcca cactgttgaa ctttgacttg ccaaacatgt cagcaggtct 240
ttcagctttc aggaaaaaag gaaggggact tccttggcca gttgcctttt tgtctgttta 300
ccaaaggctc gggtattaac ccagtttttt gcaggccaca ggagacagcc ggttgtg 357

<210> 195
<211> 357
<212> DNA
<213> Homo sapiens

<400> 195
aggtgcccgt gtgtgtctac agagaggcca agcctggaac aggcgcctgt gtgtgtacag 60
aggcagctgg aaaccaagtt acgtgaaagc ctccaccagt taccctgggg ctcctggcca 120
gacgaggttt ctgcagggag gacagactga agctcaaatg ggcagtagtg aaggcggtct 180
ccattgcggc caggctcagg ccaccgccca gcaggaggga aggtgctgga agcttacgtg 240
cccgtggaca ctggaggctt atgcacctgg accccagtgc catccaggtc ttctctgtgg 300
gccaagggtg aaagaggctt cttgaaggct gagggagtcc cagtgacggc ctgagac 357

<210> 196
<211> 357
<212> DNA
<213> Homo sapiens

<400> 196
atactactct tgaaattatc ttctaaacaa gttgatacat taggctatct gggaataata 60
tgaagatact tgatttaatt ccaaaaaaag cacaattggt tgactcacaa ttctggtact 120
ttagttaaac ggttttgttc ttatcttggc ctgatgagat accataattt acacgaatat 180
tatctaaact aaacttttta atccagtata ttagtgcgaa ctattctttt ttttttttt 240
gggatggggg cttgcttttg acctccagct gggtgggcag gggcgtattt tggcctattg 300
tgcgcccccc cctccggggt aaaagaaatt ttccgccccc aacccccgaa gaaacgg 357

<210> 197
<211> 352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(352)
<223> n = A,T,C or G

<400> 197
aaaatgaaat ctctcagaac ctgatggtat ttggatagca tatacccacc agaggaacag 60
gcttttatct agcataccac aggtctcccc tttagcacat ctgtgctcat tttgaaactg 120
tatagggaag gacattagat ggctgggaga actctgaagg acagacctgg atctcctgcc 180
atcttccaaa ggtgaaacaa caaaaatccg ccaggctttc agtcagaagc ccggaagggc 240
cactcccaag gaacagaggc aagagcagaa gtagatggag tcttactgaa actgaaaccc 300
agctcaattc ctaataggtt gaagatatga ttacctcaat gcagtctgct tn 352

<210> 198
<211> 353
<212> DNA
<213> Homo sapiens

<400> 198
gaggaagagg ctggggaccg cggcgaaggt ggtgagtgct cttgggcgcc ttctcccaac 60
gtccctgcca gactcgcctc cgggctgatt ctccagttgg tttcctggac tccagagtag 120
ctgtccggcc tggccccgga ggtgcaaagt aagaaaattg aagtcaaaga ccatgggaga 180
tacagcaaaa ccttatttcg tgaagcgcac taaagaccgg ggggctatgg atgatgatga 240
cttcagaagg ggtcaccccc aacaagatta tttaataata gatgaccatg ctaaaggcca 300
tggcagtaaa atggaaaagg gccttcaaaa aaagaagata acaccaggga act 353

<210> 199
<211> 353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(353)
<223> n = A,T,C or G

<400> 199
atagaagaaa ctaattaaga gatggaaatt cttgatttct tgttgaaata ttataccaat 60
ttccttttt tccttgatat atgcaaaacc aagcctcatc tcgagtatgg ctaatttaat 120
caatagtggg tatttcttta tccaacatgt tcttaaaaat aatatacttg catgaccaca 180
tgcacagaat atttgggatc aaatttcaat tcaatacagt ctcagagtaa gtataacaga 240
aaacctgttc cttgacctat aaggtattca atagggatta gtatctaaac ttttgtagtt 300
tgaaagactc anacataagt tcgccaattc aacaaagata tatgattcca tac 353

<210> 200
<211> 329
<212> DNA
<213> Homo sapiens

<400> 200
atcacttgaa acaagaaaac ggagggctca gtgtgccaaa agaacaccgt tgcactccag 60
cctgggcaac aagaacgaag ctccatcgct tagaaaaatc caaaaagaaa aaaaaccggg 120
gggggttttc tccccccctc ccggaggatg cgaagaacaa ggttggtttt tgtaaagcac 180
aaaaaaaacg cgggggaaaa aatggacctt ttttaaaaac cgtggaacgt ttttgtcttt 240
ttcgaggcct ttttttctgg gttaaaagat ggggaaaagc cgggggggtt ttttttattt 300
tttcggtccg gggggggggg ccagactat 329

<210> 201
<211> 385

<212> DNA
<213> Homo sapiens

<400> 201
cgctgctgtc ggttattatg gataaactat tattgttaat tccgggcaag ccacttgcct 60
ttctaggcct gcttctttgt tcattaagcg gggagcacgg ttcttgtgag gattacatgg 120
gagtgatgag tataaaggag actgcaaacc ctatccagag ccatcacctt gggagtgtca 180
ccgtggtaat cagagtccgt tattcctaca ggagctccat ccacaactgc tctgcagggg 240
acaatgggtg ccctcattcc ccacagggct ccctaccctc tccatcgata cacactaaca 300
tatgggaaat gaaggcccac cctgccgggc tttcatactc tagaatgcgt gaatttttgc 360
tcttggcagc ccattaaaag ggcta 385

<210> 202
<211> 355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 202
ttggtcagcg atgctggtga gatgtaacct cagaaaagca agattaagtt atagctatcc 60
cacagggcac cttcatgcaa ttagaagaaa gtgtccctcc agaagatgca gccccctcca 120
agggccatgt cttggcaaat tcatcagccc ttgtataaat tagaaaaagt caacttccct 180
ggatagatgc agccccagag gtatatggct ttgtgaagag ccagatttca gcaccaactg 240
gcctacagaa ctatatgcgg tggccctggt tgttttttg ttaccagata catagcaact 300
tatcttgtgt actttgtcgg ctctctgtag tgaaacatgg gatttattcc taatn 355

<210> 203
<211> 353
<212> DNA
<213> Homo sapiens

<400> 203
acacggaggg gtcacctgcc ccagcgcccc acggtttcca gccttggcct gtcctctttc 60
acctggccca cgggtgatgc gtgctgtgct ggcctttctg cagggtacag tgcggtcagg 120
ggactgctgg gggctgtcag agccccagcc ctttgctcca taccagggca gccgtttcca 180
gtcctgaggg tttttgcgac tgatcctggc tgggacttgc ttcttactag gagaagcaag 240
agatccaagt ccttcagtca gacgctgctc tcagacatca gaggggcagg acactgaatg 300
cacatgtggg ttctgagggc tcctttctct ttgaaatcct gcaacaatta acg 353

<210> 204
<211> 385
<212> DNA
<213> Homo sapiens

<400> 204
cgttgctgtc ggtgtatttc attggaaatt gatgacttga aaaaaattac caattcactg 60
actgtgcttt gcagtgaaaa acagaagcaa gaaaagcaaa gcaaagccaa aaagaagaag 120
aaaggtgtgg ttcctggagg gggattaaaa gccaccatga aagatgatct ggcagattat 180
ggtggttatg atggaggata tgtacaagac tatgaagact tcatgtgaca ttttatcttt 240
tcttggtgtc atctttatgt tgcccacaat cccttgaaca tgtagcacaa cttcctttcc 300
tttcagttct gccaaatgct acaatcagaa gtgcagtatc ttttgtgctg gttatttaac 360
cccttgacac ttaggtgcta atgtg 385

<210> 205
<211> 387
<212> DNA
<213> Homo sapiens

<400> 205
cgttgctgtc ggtgtatttc attggaaatt gatgacttga aaaaaattac caattcactg 60
actgtgcttt gcagtgaaaa acagaagcac gaaaagcaaa gcaaagccaa aaagaagaag 120
aaaggtgtgg ttcctggagg gggattaaaa gccaccatga aagatgatct ggcagattat 180
ggtggttatg atggaggata tgtacaagac tatgaagact tcatgtgaca ttttatcttt 240
tcttggtggc atctttatgt tgcccacaat cccttgaaca tgtagcacaa cttcctttcc 300
tttcagttct gccacatgct acaatcagaa gtgcagaatc ttttgtgctg gttatttaac 360
cccttgacac ttaggtgcta atgtgca 387

<210> 206
<211> 380
<212> DNA
<213> Homo sapiens

<400> 206
cgttgctgtc gctggatagt agttgttctt caggcacttg gaggccttgt aatagctgct 60
gttattaagt atgcagataa tattttaaaa ggatttgcaa cctctttatc gataatatta 120
tcaacattga tctcctattt ttggcttcaa gattttgtgc caaccagtgt ctttttcctt 180
ggagccatcc ttgtaataac agctactttt ttgtatggtt atgatcccaa acctgcagga 240
aatcccacta aagcatagtt gtatactatc tttaactggt ttttcacgat ggggcactag 300
gaatctcgac attaatcttg cacagaggac ttctacagag tctgagaaga tatcatcatg 360
ctgaatctga tcatactgtt 380

<210> 207
<211> 344
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(344)
<223> n = A,T,C or G

<400> 207
gatagtgaaa atattctctt actcaagagc ttaaaaatta gctattttat aaaaattgtg 60
tacatgtgga ttacaaaacc tgtttccttt gtaaacagca gagcggtctt gattttctta 120
atgtctaagg tcattactct agaaatacac cctatggtgt ccttgaggaa accatggcta 180
tggcttttgt aactgggtta caaaatcagc tcacgccgag tgcgatataa aagtcaacag 240
gctctgagtg aggaataaga gctctactct aggtaaaatg cttgaatttt ctgttctgga 300
tggctcanga gacttttga gggggatctc agtgacattt tgga 344

<210> 208
<211> 349
<212> DNA
<213> Homo sapiens

<400> 208
tttgtgatct gtcatggtca tggtatttca gagttggagg atggtctgag ttctgacctg 60
gtgtaggaat cccttctccc aaaactctaa cagtacattc tcaggcttcg tgagctcagg 120
cttaagacac attatttttct gatgctggac agcttcttta aaaaaatgta gtttcttaca 180
ttaagctaaa atttatttta tgaaagttca agaattctgg tccaaattgg gatgaggcct 240
atggtgcagg acttccgtga aattttatga gattacaaat gcaaaacact tagaacagtt 300

tctggcctat tgccagaatt caataattga ataaaggcag gcagaaata 349

<210> 209
<211> 346
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(346)
<223> n = A,T,C or G

<400> 209
cctggtctca aagtctcagc ctcaatcaat cctcccacct cagccttctg agtttctgga 60
attacaggca tgagccacca cgcccagcta aatgactgct tttgaaccat acttttcttc 120
tgctttttcc ttatcaactg actttgttta ataaatcctt gtctttaagg tcacagactt 180
tattgtaatt tgtgggttag catggaggtg gggcaagagg tcccgtttct ccaccaggta 240
accaggccat gctgagaata cttccctcag acatttcctt aagcatgttt tgggaaggtt 300
atacttccac actggaatta tataagtgga attgaataaa acccan 346

<210> 210
<211> 345
<212> DNA
<213> Homo sapiens

<400> 210
ctaattacgg ctaatcacag tagaaaataa aacttgattc cctttcctgc atggcttgag 60
catgaaatag gagaagggac aagacaacct ccgggtattg tttctaattc tttaaaaagt 120
tgtacttgca gccaggcacg gcggctcact cctgtaatcc tagcactttg ggaggctgag 180
gcaggcggat tgcctgagct caggagttcg agaccagcct gcgcaacatg gtgaaacgcc 240
gtctctacta aaaacacaaa aaattagcca ggaatggcag tgtgcacctg tagtcccagc 300
tactcgggag actgaagcag gagaattgct tgaacccagg aggca 345

<210> 211
<211> 347
<212> DNA
<213> Homo sapiens

<400> 211
ggcgacagag cgagactcca acttaaaaaa ataaataaag aaaaacagga tgcatccagc 60
ttgtctcaca cactctaccc tgggtttata tttattatcc acgaggaaac atccaaaatc 120
aggggtcaga gtcatggttc cccaccttgt ccatgacgag atgggccagt ccacatcaca 180
ggcacaggta ggagacccca acacagtgtc cactgttcac attctaaagg tgactgtcgg 240
ccaggcacgg tggttcacgt ctgtcatccc agcaatttgg gaggccgagg cgagcagatc 300
atccaaggtc aggagttcga gaccagcctg gccaacacgg tgaaacc 347

<210> 212
<211> 351
<212> DNA
<213> Homo sapiens

<400> 212
atgtgtacac aatcttccag catataccaa tagctgaatt tgtaagatat tatatagtat 60
ttgcatgtgt atagctcttt cttcatcttc tgtgtacaac tgaaatattt ttttcatgtc 120
ctagtaaaac cctaaattga gaattacgca ctcactaaat gttagaccag ctagtcattt 180
agaaaacagt gcatgtgatt tgtttaagcg gcaggaagta ttaggtgtca acaattcaaa 240
tcactttgtg tctttttttt ttgaaacgca tgcctacttc ttaaccccgc ttgggggccc 300

agcacccaaa tagcactttt tgtacgggga aataagtact tagcgaggca c 351

<210> 213
<211> 348
<212> DNA
<213> Homo sapiens

<400> 213
ttgtatattt tagatgcctc tttaaaaata aatttacatg atgagaccct gtctctaaaa 60
aataaaaata aataaaataa aaataagcta ttttaaaagt tagttattta aattgaagaa 120
tgtggacaag atatactaac agtttctcta ggactgatca cccattattc catgaataat 180
agaaatttct gataaggatg ttgcttaatg gagattttcc tatgttatct ctgcggttct 240
agtgggtggc aaaggcagct atccgggtag ggcactgtaa aggtgtggcc ttagtcattt 300
acactaggac aataagagac cctccacaag tgtgtaactg gataaagg 348

<210> 214
<211> 129
<212> DNA
<213> Homo sapiens

<400> 214
cggggacggg ttcgggcata ccgcatttag ggagctttgc aaaaatagca taatatggga 60
attgtgagat gctactgcat aaattgtcgc ctatctaaat tgaacataac gtgccacact 120
cgactatac 129

<210> 215
<211> 373
<212> DNA
<213> Homo sapiens

<400> 215
tacggcctgt tatattacga cagaagggca cagctccacg gacttagagc agataaggta 60
attgctgctc caacagccca gcctcgtccc cagctcagag tctagtatgt tagaaactgg 120
actgcctcct ccccccacat cctcccctag tagcttcagg agggggacag cttcactgct 180
gtccccatgc agatggtgca gtgcacataa aaggtgggct gcaggccaag cgtggtggct 240
cacgtctgta atcccagcac tttgggaggc caaggcagga ggatcacttg aggtcaggag 300
ttcaagacca gcctggccag catggtgaaa tccccatctct actaaaaatg caaataaagg 360
ccgggcgcgg tgg 373

<210> 216
<211> 372
<212> DNA
<213> Homo sapiens

<400> 216
cgttgctgtc gaaaaaatct ttctaaacaa caaataccta acattattac tgattgtttt 60
cctaatttat cctcctaagt tgaatggtaa caaagctttt ccagctgaat gaatgcactt 120
agctgataaa ccagaatttg ttctttttct tccttctttt ttttttgaaa caggttctca 180
ctctgtcacc gaggttggag ggcaggggaa tgataatagc tgactgcagc ctcaaccttc 240
tgggctcaaa ggatcctttc acctcagcct cctgagtagc tgggaccaca gggggggccc 300
accacaccgg gctaatttta agggattttt tttcctttct ttttttaccc atggtgccca 360
gggtggactt gg 372

<210> 217
<211> 347
<212> DNA
<213> Homo sapiens

<400> 217
agtgactagt acaagaagcg aatgctcctt tcctctagtg gacatgagaa aactatccaa 60
aactgcagtc acctggtgtt ccagctggct gcgctatctg ccgcttgcca gatgcataaa 120
gctaccagga gattagttgg tgggactggt aggaaatagg ggaaattatg gtttaggtgt 180
tcatgatctc tctgtgggaa aatgagggct atttttccca ctgtcaaatg cccaaaggaa 240
ttttaacaat ctttttctta ctcgcacccc attgtctttt tgtttcaaaa ggccaattta 300
ttttctcatt attactactt attggctcgg tgcgaggtag actttcc 347

<210> 218
<211> 351
<212> DNA
<213> Homo sapiens

<400> 218
tggggtgggt gacaaaagct ttgggcaagg atgtggaaca aatcttattt taatttggct 60
taattgactt aactacaaag cccatcattt acttgaagca caaactataa ctctgatgtt 120
ttctccattt taaaattata aatgcattaa ttaaaaataa ttaaagagca aatcattaat 180
agcaaactac cataacttga tacttttttaa cattaatact taataggttt aatatctagc 240
agggcggggg aaggcacagg gataatataa ttatgtctgc tctgagcaag ggagtgacaa 300
taggtgtacc actgacttgt aatacagcag ctacaccagc tcttgaatgt a 351

<210> 219
<211> 317
<212> DNA
<213> Homo sapiens

<400> 219
gctggctggg cggccccaca gacaggcaga gccaagcact cccctctcag gcactctgcc 60
gcaggctgga cagacagatc agctgggcta gggcgtattg tcccctggca gacagacaaa 120
tctgcagctc ctgagtggtt tttgccccag ccctgggacc tcttgtttcc tagcaacatt 180
cttaattcag agcgggcacg gtggctcatg cctgtaatcc cagcacttta ggagggcaag 240
acaggaggat ggcttgagcc caggagttca agaccagcct gggcaacatg gtgagccctc 300
atctctacaa ataaatt 317

<210> 220
<211> 324
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(324)
<223> n = A,T,C or G

<400> 220
tagggtgtaa atgcctggat gctatagatt ccaatttaac tatgaaaaga actgactcat 60
tcatttacat ttctgttaca gacagcccag gaggttacag tgagctcttc actaagaatc 120
tggacgaaat gcatcactag gggttgattc ccaatctgat caactgataa tgggtgagag 180
agcaggtaag agccaaagtc accttagtgg aaaggttaaa aaccagagcc tggaaaccaa 240
gatgattgat ttgacaaggt attttagtct agttttatat gaacggttgt atcagggtaa 300
ccaactcgat ttgngatgaa tctt 324

<210> 221
<211> 351
<212> DNA
<213> Homo sapiens

<400> 221
gttcaccatg ttggtcaggc tggtcttgaa ctcctgactt caggtgatcc acccgtcttg 60
gcctcccaaa gtgctgggat tacaggcgtg agcccaccgc gcctggcttc ggaattgcat 120
cttaatctct gtggcggctg ctatttttgt ttctaagttc atgagcacag gtggctgcct 180
ctatctttct cctccactta agcaggaaca attcaggagg cagactccac ccaatgctgc 240
aaatcggccc tattatcatt gaccctgaca gaatttcagg agtgtcaggc cactccatac 300
tgcaaacagt acaggttgct tataatcgcc aggaggaaag aaaatatcca g 351

<210> 222
<211> 378
<212> DNA
<213> Homo sapiens

<400> 222
tacggctgct taagacgact taaggggaa tgacgcagcg gctcttagag gaacatatgg 60
aaaacaccca agccggagtc tctcacaagc ttgaatgtgt gttctggagc tgaaggatgc 120
acggttgtta agcccctgtt cttttccgtt gtttaatcta atgttctttg gaataaaaac 180
ctccctgcca agtagtactt ggttttatgc tcaacatgct ttgactgttg aaaagagacc 240
tttggcacac attgaaggga tggtgatgga gatgccaatc catggaatca ggtggcgcag 300
ctatgttggt agctatagca gaagtcttct tggcaaagat tcctcccggg aaggaaggta 360
ccattggaga accatgcg 378

<210> 223
<211> 347
<212> DNA
<213> Homo sapiens

<400> 223
tgcgtttttt tttacatgtg tgtattttgc ttattttatg catgtatttt aaaatagcaa 60
gttgactttg ttgcctctgg agttccacag aaccagggta atgcgtgggc atggaatact 120
aacaaggaga aacagcttcc tgtttaagaa caattcccat gttttttttt tataggagaa 180
aattgagagc tgtttggggg ctgccatact ttacatttac tttactctac atttaatgtt 240
ttggtctcca agtaaagaag agtttcatta gatgtagcaa aaacaaaaca tatttttatt 300
cttcagagct ttcaatgatg aaagaacgaa ccttgaagat gaaaagg 347

<210> 224
<211> 349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(349)
<223> n = A,T,C or G

<400> 224
aggtacgggg gcgagagaga caacanaagg ggagcacact gaacaaatga tgtgagaatc 60
tcttcagttc caaccaagtg gcgggaacca gctaagagtt gggtactgct gaggaaaatt 120
gatgggcagt tggtaaaata ggtgtgaatg agagaaagct ttgttgggga accatggtgg 180
gtatgtgggc acgttctaca ttactacaag tattgggaat ttcccagggg aacagcaaaa 240
tcttggctta tttatgttta attttaaaaa attcccactg ggtgcagtgg ctcacgcctg 300
taatcccagc actttgggag gctgaggcag gcagatcacg aggtcaggg 349

<210> 225
<211> 344
<212> DNA

<213> Homo sapiens

<400> 225
ggagatgctt ttccttctgc atgttaactc acaactcatt cctaatcatg gaggctctaa 60
tccaactgac taaaatgctt ttctccccac ggaactaacg tagttacttg agagaagaga 120
gtaaaccagc ttctcctgcg tggcacaggg ctatttttca ttatagggaa acggacttct 180
ataagggcat ttaccacatc ccaagggcta atttctcatt taaaaaatag gggcggtcgc 240
ggtggctctt gcttttaatc ctaatacatt gttttttta tgccggaggc tcaggaacta 300
aagtggaaca aaaacaatcc ccctttcaat atagaaatct ttag 344

<210> 226
<211> 346
<212> DNA
<213> Homo sapiens

<400> 226
tacaggctga gagcagaggc tgaagtaagg ggagttctaa tctttgggtc agttgccctc 60
tccctgtgtc atttcttatg aaatagaagt tatgctattc ccaaaatata tacagcacta 120
ggcaaagtgt taagaagcct agattttgcc agaaaccatg tggagtttgg agcaagtcat 180
ttctactaac tagggcttcc tccttagctt ataaaatgga aggggtagac cagatgaaca 240
tgaggtcttt tttctccccc ctctaagagt aaattgtctc aacaatttta caaggtgttt 300
acaaaacaat acacattcac ataaaggtga tgtatttata tctata 346

<210> 227
<211> 317
<212> DNA
<213> Homo sapiens

<400> 227
gagcagactg aacaaatgat gtgagaatct cttcagttcc aaccaagtgg cgggaaccag 60
ctaagagttg ggtactgctg aggaaaattg atgggcagtt ggtaaaatag gtgtgaatga 120
gagaaagctt tgttggggaa ccatggtggg tatgtgggca cgttctacat tactacaagt 180
attgggaatt tcccagggga acagcaaaat cttgtcttat ttatgtttaa ttttaaaaaa 240
ttcccactgg gtgcagtggc tcacgcctgt aatcccagca ctttgggagg ctgaggcagg 300
cagatcacga ggtcagg 317

<210> 228
<211> 351
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(351)
<223> n = A,T,C or G

<400> 228
aagggtttct ttttctccct ttttttcttt ctattgttat tatttttta ctgagggttt 60
tgttagcttt taatcttgtg gaactcagaa actcccatta atacggtttc atagaaaata 120
gtcgtacaaa tttgtctttg catcttctct gcagaagccc ctttgccaga tgaattcaca 180
gagtgttttc ttttggaatc cttaggctag gcttacttat ttgtgatatt tgagtatgag 240
tttgntttcc cactagtata ttacaacttt gagggccagg agctgtttta tgaatctttg 300
agggccccta tctcataact gcgcgggttc tttattttga tggcacattt g 351

<210> 229
<211> 346
<212> DNA

<213> Homo sapiens

<400> 229
ttaacacagt gaaaccccgt ctctactaaa aatacaaaaa attagccagg tgtggtggtg 60
ggcgcctgta gtcccagcta cttgggaggc tgaggcagga gaatggcgtg aacctgggag 120
gcggagcttg cagtgagccg agattgcgcc actgcactcc agcctgggtg acagagcaag 180
agtccgtctc aaaacaaaac aaaacaaaaa agaaaaaaga aaccaccacc aaccaaccaa 240
acaaaaccca aaaaacccaa agtaacggag gtggccgagg gagctgggga tggggaggga 300
gtccaaacac ctgggagcta gaagtttccg aaaactgtaa gtcttt 346

<210> 230
<211> 347
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(347)
<223> n = A,T,C or G

<400> 230
tgtgtgtgtg tgtgtgtgtg tcccaagggg tgtgtgggtg tgtgtgtgtc ccaaggtgtg 60
tgtgtgtccc aatggcagcc tcagggtaaa ctgagcaaag aatgaatttt gacattgctt 120
gggagagcag aaaaggttct atgatgagga tgcaggtctc agacattcca gcataggaca 180
gatgagccaa ccttaagtcc cagacagagt ggaggagagt ctattcccgc ccctaccctg 240
aggctgattg tcccagttcc agaagggact cccaggaaaa tccagcctgg agaggctgcg 300
cccggagcaa ttaataacag gacaaggcca gcgagtggtt ttgcttn 347

<210> 231
<211> 238
<212> DNA
<213> Homo sapiens

<400> 231
aacatcactg gctcccattt ctctgacata ctaccaacat ctgttcagtt ctaccactta 60
cattacataa aaacccacta gttcccaagt tttgaatgta catatgcata caggcacaca 120
tgctcgcaca catatataca catgcacaca cacatataca caatattata caattgttta 180
gggatttaaa aagcattccc tggccaggca tggtggctcg gcctgtaatc ccagcact 238

<210> 232
<211> 376
<212> DNA
<213> Homo sapiens

<400> 232
tactacggtt gcgacatgac aacagacagt ggtattctct tacggacgac aggtgccctg 60
ccgcgccaac aacgctgtat cacctggagc tgtgataccg ccgatttatc tgccgcccgc 120
atagcctgcc gtccacgggg tgtcagcgag attggaatat atttttgca cctcgcggac 180
ggcttgggag agtgaagatt atcagcttta tctttccaaa tggagacaag tatgtttttc 240
tcctctgttt agatggtgac tgtacaagaa catcttctgg aatctacgag agaaatggaa 300
taggtattca taccactcct aatgggattg tctacacagg aagcggaaag atgacaagat 360
gaatggtttt ggaaga 376

<210> 233
<211> 345
<212> DNA
<213> Homo sapiens

<400> 233
gagtccccaa gtggccatgt tacatgtgat ctgtgacata tacgatcaga tgttacctgc 60
atcctagggt cgcctggcat gcccatgagt gacgcttagg accgtgcctg gtgctggtgt 120
gtggacaatg ctgggccagt ttgcccaggg ctatgcctgc cacctctact tttatttcac 180
cctctggagg cggacgcatt ggaaagcatg tggggcagga ggtgaggaag gaaattcaga 240
caagctgagc agagcggcca ggactggaat cttgggtgcc aacccgcaag gtggggaaac 300
tgatttccat ttcccagtaa ttacaggtca ataccacacc tgaag 345

<210> 234
<211> 291
<212> DNA
<213> Homo sapiens

<400> 234
tacggctccg agacgaccac agaagggagc ctgggtgaca gcgagactct atctcaaaaa 60
aaaaacagat ttctctccta tgagagtttc tggcctttga tgctgcactt tcctcttctg 120
aaacatcaag ggcttttaaa gagggatgga gctgactgcc tggttctgag gcatgaacga 180
cactggtagg tgagagcaag atggtacaga ggagttcaaa tttgggtcca ccatcctggg 240
ctccgctgca tagtgttagg cagtcactga gctggttcct tcccaccaca t 291

<210> 235
<211> 351
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(351)
<223> n = A,T,C or G

<400> 235
tttctcttgg cctaatatcc tggctagatt ttggcagttc cccactctag gggcaatgtc 60
ttttcagcct gcacctctga ctcctagctg gatggatgac ttcaggatac acaatagaat 120
cattcctgtg acttatctgc ccacagtccc aaattcagtt gcaaacttct cctgaaaggc 180
tgtttttgaa taatgacagt gactggactc accttgctct tctgcatact attaattccc 240
ctgccagtca atctcccttt ttttggtcaa agtatagttg tatgtatatc gatctctggc 300
ttagtcccat ctctttcttt ccctccacca gntctgtcat taaatgtaga g 351

<210> 236
<211> 371
<212> DNA
<213> Homo sapiens

<400> 236
ctacgcttgc gatgagacaa cacaacggac tgtcacacac gcacacacac acacacacgc 60
acacagtccc ttaccctctg cttagagttc cccctctcct gcctgtacag atgtctgtgt 120
tatttggccc catcaaatag gtgaattgag ttgttcatta agggagggga agagctcaga 180
tttttaagtg attatatttt tgttttggac acagacattt cctaggaagg aaagtgtttt 240
tggtaatgga ccacggaatc aaaacagatt actcactgtt tctgtccatt agcgcatatg 300
atggggagca cctcaaagaa gtttagtcag agggataggg gctaaagcat tacattcatc 360
ctgaaaatgc c 371

<210> 237
<211> 350
<212> DNA
<213> Homo sapiens

<400> 237
ggcggcgaat gtggtgagtg ctcttgggcg ccttctccca acgtccctgc cagactcgcc 60
tccgggctga ttctccagtt ggtttcctgg actccagagt agctgtccgg cctggccccg 120
gaggtgcaaa gtaagaaaat tgaagtcaaa gaccatggga gatacagcaa gaccttattt 180
cgtgaagcgc actaaagacc gggggactat ggatgatgac ttcagaaggg gtcaccccca 240
acaagattat ttaataatag atgaccatgc taaaggccat ggcagtaaaa tggaaaaggg 300
ccttcaaaaa aagaagataa caccagggaa ctatgggaat acccccagag 350

<210> 238
<211> 352
<212> DNA
<213> Homo sapiens

<400> 238
aggtactggc tctcagagag catctctgca tttgcccagg accccaagtc catggcactt 60
tctgccatga gggaaggaca taaagacttc tgaatagctt ttgctaccag ctgatcatac 120
agccctaggg tcttcagcaa acacagctag tagccaaacg gtggttacaa cgggctttgg 180
gcgagactca gtgctttact gacctcagct ctgacccagc acagtcctag tggtggtggt 240
cacaggggta attttgtcac cccacaccca gctccaggca ggttggcaca cacagagaga 300
gtttccattt agggggagaa agtaaggaaa tagaacaaga gcctctgcct gg 352

<210> 239
<211> 372
<212> DNA
<213> Homo sapiens

<400> 239
ggctcagctg attctgggcg ctggatgggc ggccttggca ttaggtccag atttgggtcc 60
taagtactgt gcccaaccgg cccgagggca agggggagga gacaggaacc gcgcccattt 120
tccggatcag gttcttggaa ccagcccgga aatcctggga ctcaatctgg gggccagatc 180
tggaggcgat ggtttttcta gagacgggct gatgcagccc cagtatgccg tcgcactcat 240
ttcccacatt ccaggaacgg tccaggtctg cccttcatcg gtttgggaac tccgagacga 300
ctccctctct ccacaactgc agggtgggcc gcgctctgaa aacctggcaa agcgaagggg 360
gtccctcaga cg 372

<210> 240
<211> 363
<212> DNA
<213> Homo sapiens

<400> 240
cgtccgtatc atgatgtcaa gatatcgaga cccttctgtc taacacggcg aaccaccgtc 60
tctactaaaa atacaaaaag ctatccgtgc gtggtggggg acgcctgtgg tcccagctac 120
tccagaggct gctgcaggag aatcgcttgc accaaggatg cggttctttg tatgagccaa 180
gatcacacca ctgcactcca gcgtgcatga caatgtgaga ctctgtctca aaacaaacaa 240
acaaaacaaa acaaaaaaac gagacaaggg cattcccccg ggacaggcgg tgagagtggg 300
gagtatccag aacacagccc cttccttggc cccaggccct ggcgtcggga gtaactgact 360
tca 363

<210> 241
<211> 335
<212> DNA
<213> Homo sapiens

<400> 241
aaagatgggt ccttaccttt tgtaatgaaa tatagaaaat acttattgtg actttgcagt 60

agttaaacat agaaataaaa catattttgt acatagatca gtggttggat agactattta 120
tacatgatat gaaatattga tgacttataa aagagaacgt atcagtgcta tatgtattga 180
gacatggagt gagaagcttt attaaattta aaaatgtttg aagaatagtg tgtagagtgt 240
acttataaaa ccaaaacaaa acaggagaca aacagaaaaa gcatacctat gtgttcatat 300
atttgaaaat tcttccatga ctgtaaagaa aactg 335

<210> 242
<211> 338
<212> DNA
<213> Homo sapiens

<400> 242
actttacact aagctatggc aaccataagg aggcaagggc tgtgatgtga gtgggtcttc 60
agctaagcta gagctgccgg gcacatagca tgaggctgat gctaccgtga gactgtgtgg 120
aggcccacac agtccaagat atgcacagga gtctcataag attaatttac aaccaagaat 180
tacccaagct tggatacaca cccaaaagaa ggcagagatc caaacagatg tttgtacatc 240
agtgttccta acagcatttc tcacaatagc caaaaggcag aaaccactga agcgtcttat 300
cgatggatga tggataaaga aaatgtggta tatacata 338

<210> 243
<211> 337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(337)
<223> n = A,T,C or G

<400> 243
gcccctcgg attctttcta taagcaaatt gcgccttgga cataggcttt gaatgctttg 60
agagaacctc tcttcataag tggaaataaa atcatgattt aattgtatca aacgcattat 120
ggataatcta tgggatttaa tgaatcaata ggtgaggctg agttggtaag aagtgaacgt 180
tacttctgca tttaaaaaaa tacatttaac tcaataggaa gtaacagatg agtaattgga 240
aaacatttta aacttgatca taaagaaata aaaattggcc atgtgcagtg gctcatgtct 300
gtaatcccag cactttggga ggtaaggcgg gcagatn 337

<210> 244
<211> 341
<212> DNA
<213> Homo sapiens

<400> 244
tgcatatagt ttttgtctta atcagtggga tgagtcttaa ggtaatttat tgagaacaga 60
gaagggagga taggttgaca aacaaacatt ttcaagtgtt gtattttgga aactttatta 120
aatgcctact caatatcagt atgtgaattt tacccacaca aatgaaccta ttcaatagaa 180
attttcttaa ttactcaacg taatacacat gcacatgcgc acatgcacgc acacacacac 240
acacgcacat acacacaaac ataacccagc ctccactact taagatgaga gtatagtcta 300
gttaaccagg aggttatgag agttcagata aagtttgtct t 341

<210> 245
<211> 366
<212> DNA
<213> Homo sapiens

<400> 245
tacggctgct agaagacaca gaagggtcca aggaagtgac ataatcaatc tgagctacat 60

tttctcgcta ttaatctggc agtgctatat ggaaaggaag aaatggggtg tgggagtata 120
gttagaatta tattattgtg gcttaaggct aaggaaacaa tttctgacac tggtaaggga 180
caaaaggtat ggaaagaggt tggaagggac attattgcag aacaatcaac aagattaggc 240
attattggga actgggccac aaggtagagg aagaaagaat gataagtgac tctgaggctt 300
tgagcttggg tggctaaaaa tgtatagcac tggaacacag cttttactac gtgatcgctt 360
gtcgag 366

<210> 246
<211> 122
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(122)
<223> n = A,T,C or G

<400> 246
ggtccaatat ggcggcgccc agtggcggtg tgaactgtga ggagttcgcc gagttccagg 60
aattactcaa ggtgatgagg acaatcgatg acagaataat acatgaatta aacactacgg 120
gn 122

<210> 247
<211> 337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(337)
<223> n = A,T,C or G

<400> 247
tttctgtctt attcactgtt cctcctcaca ttcctagaac tatgcttagc acaaaagagc 60
tgctccataa ctatttgttg aatgaatgag tgaatgatta agtaaataag tgcggtcctt 120
ctttcctctg gggtcccatt tgctagcatt gcccaggtgt tgttaactgc ttgagatttt 180
ccttgtgaca gcacacagtg tgaagggaag agaagaggac tgcagtcact gtgtccattt 240
agttcttgtt aaagacttgg ggctgggcgt ggaggctcat gcctgtaatc ccagcacttt 300
gggaagccga ggcaggcgga tcaaaaggtc gggagtn 337

<210> 248
<211> 340
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(340)
<223> n = A,T,C or G

<400> 248
ttctagtaac ttgtactttc cttaccaatg atctctttcc tgcgctaagg gttaacttaa 60
acttatctca aagttaattt ataaaaaaaa gtttgcctga ttcaccttat taccaatatt 120
gttaccatta aaatcagtag taacctggta ctcaattact ctgattagtt ttcttatatc 180
tagagttcac aaaaaacgtg agtgactgcc tgtccttaac ttttccctac atatgcctct 240
tcattatggc ttctgagtga actgtagaat tgctatttta caagtgatgt gaaaacttgt 300
gcagtgtaca atatgtatgt cacacaattt tacaacatan 340

<210> 249
<211> 339
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(339)
<223> n = A,T,C or G

<400> 249
aacacaccca caccaaagca catcaagaaa ttcaaggatg cctgagaaga aaataagata 60
ttacaagctt ctagaaataa aagaatgttc ccatacaaaa gatggagggt tgaaatcact 120
ttagactttt aaatagtaac aatggaaata agatacttga gcaatgcctt ccaaaattct 180
gaaggaatat tattttaaaa ttagaatttt atagccagcc aaactatcat cagctgtaac 240
agtaaaatga aaatacttta aggctgggtg ccgtggctca cacctgtaat cccagcactt 300
tgggaggcca aggcagacag atcactagag ctcaagaan 339

<210> 250
<211> 337
<212> DNA
<213> Homo sapiens

<400> 250
aaacctcgtc tctactaaag atacaaaaaa actagctggg cgtggtggca tgcgcctgta 60
atcccagcta tttgggaggc tgaggcacag aatttcttaa acctgggagg cggaggcttc 120
agtgagccaa gattgcgcca ctgcgctcca tcctgggggа cagagcacga ctccatctta 180
aatcaaagca agaccaaaga tggcatagaa tccttcctgg aaccttgcgc agagggaaga 240
gtaacattaa cttcacacgg gccactctgt tcaccatctt tgcttcaaaa agagcctacc 300
ctggaaggcc cggccccgga aaccggattt tggggtc 337

<210> 251
<211> 341
<212> DNA
<213> Homo sapiens

<400> 251
aggctggtct ggaactcatg gcctcaagcg atctgccccg ctctgcctcc caaagtgctg 60
ggattacaag tgtgagccac cgtgtccacc ggggaaggct tttggtcaga acaatggctg 120
gcaaaaccac aggcatcgga aggccagagc tagggatata atataaatgt ccctacagtg 180
taacagatga tgctacataa agaaaatccc gtaatacaca cgatttctga atgtcctgct 240
gaacattcgg tgagtgaaaa ctaattatct gagagttgaa cctatctttg ttaataaaca 300
caaagcggcc gggcgcagtg gctcacgcct gtaatcccag c 341

<210> 252
<211> 335
<212> DNA
<213> Homo sapiens

<400> 252
gtatttatta agtatttacc ctgaaataag tactgcacga agcatattca ttcagtattg 60
tccagttgct cttagcatga agtcactggt gtcaccttga tggcagtgat gagacaaatt 120
acttgtttca cctctttaaa catcagatag attgctgggg acaaagagac agcatggctt 180
ccaaccatta cacaagtccc ccttctgcag ccaggatcat gtctaggatg atgcagttat 240
ggaagacagc atgctgagtt tctattaatt tgatgaatca ccaaattgag accagtggtg 300
gtggtgtcca gggacaaagt gaattgcttc agcag 335

<210> 253
<211> 334
<212> DNA
<213> Homo sapiens

<400> 253
cccaaagtgc tgggattaca ggtgtgagcc accgcgccca gcctctgaat actttttctg 60
cttactcaaa gattagcctg tattgcggtg ctcacttaaa tccagttgca acattacaaa 120
ccagccttat atatttggac atgtttactg tttaatgtac cgtaaaaata ggaaatttgg 180
gttgggtgca gtggctcacg cctgtaaccc cagcactttg ggaggcttag gcaggcggat 240
cacctgaggt caggagttcg agaccagcct ggccaacatg gtgaaatacc ctctccacta 300
aaaatacaaa aattagccgg tcactgggcg gcac 334

<210> 254
<211> 180
<212> DNA
<213> Homo sapiens

<400> 254
ataggtaaat attaatagca ccaagctttt gtttaagcca aaaacctgag aatcaccctt 60
acttcctgct gaaacctcac attctacatc tagccactga aaaagctgct ttgcattatt 120
ttcaaaatac attccctagg gccgggcgct gtggctcaag cctgtaatcc tagcactttg 180

<210> 255
<211> 337
<212> DNA
<213> Homo sapiens

<400> 255
acctcgatag aggtgagaaa ataaggcggg accctctaat attcattgga catctgtgca 60
cagtactgtg gtagcccctt tcacatagtt tacattcctg gaatcttcaa aagaatttat 120
agaattgctc ttacgccttt ttttattgat ggaataaaac agataagaat accaaagaag 180
aggctgggtg cggtggctca cgtctgtaat cccagcactt tgggaggccg aggtgggcag 240
atcatgaggt caggagagcg agaccatcct ggctaacaca gtgaaacccc gtatctacta 300
aaaataccaa aaaattagcc aggcatgatg gcgccac 337

<210> 256
<211> 342
<212> DNA
<213> Homo sapiens

<400> 256
agtacaccaa aagagagaag gaggaatgaa acttaatatt cacctgttaa aaccattaac 60
tacaaacctt ctttttttt ttttagaagg gggggtcggc tttaatccca aaggggggg 120
ggaggggggca ttaatggggg ggcggaaaac ccaatttgcc gggtgaaacc ctttctatcg 180
ggctaaaaat tccaaaatgt tggaaaaagg ggggccccc actccacccg gataatattt 240
tggatataaa agaaaaacgg ggtctacggg gggaacccag gggggtgagg attctgggac 300
ctatgggaac caccccccta tatccccaaa agggggggta ag 342

<210> 257
<211> 336
<212> DNA
<213> Homo sapiens

<400> 257
tgatccagta ccactagtag tgacaataga acccacccat tgttctaagt gacaacacac 60

tgatgcaggt actattattt tctcaaacaa ttggaatata gtctaatttg ccgacagctg 120
caaagcagca gagccaggat tcaaacccag gcagtctggc cccagagtgc ctgcttcaaa 180
tcactacatc tcttcctctc ttatacttat tcatcagtag atgcctagat gtggggcttt 240
acacttcagc agatactaag agggccatgt accaagcgcc aagtactgag gaatacaaac 300
ataaatactg cttgagggcc aggcgcggtg gctcat 336

<210> 258
<211> 344
<212> DNA
<213> Homo sapiens

<400> 258
cggggatgcg gaagtacgca ccacagccat catgcaaggc tattgatgct ctattagaga 60
ggaatgtgca gactgtgaca cacttttgc cattatgacc tgctgcctgc aatgtgtcca 120
cgacgcctgc atacacttta tcgttcagat gcacagcgag caggggagga gatctgggtc 180
tttgaccact atcttgagca gctgtgccag ccccaggctg catccacttc ttggtattgg 240
gaaggacaaa gccctattta cagacaagtc tctattccat gcagcttaat gcaatcctga 300
ctcataaagt acctccaaac caccgctccc cagttgttcc atgg 344

<210> 259
<211> 260
<212> DNA
<213> Homo sapiens

<400> 259
ggacttccct ctgtggctct gctcagaact ggcggttttt cccagctcct tgcccagacc 60
aatacttcca tgctgtcttc aagccctgct tcctgcacat ctcccagccc agatggggag 120
aacccatgta agaaggtcca ctgggcttct gggaggagaa ggacatcatc cacagactca 180
gagtccaagt cccacccgga ctcctccaag atacccaggt cccggagacc cagccgcctg 240
acagtgaagt atgaccgggg 260

<210> 260
<211> 333
<212> DNA
<213> Homo sapiens

<400> 260
actactactt ttcatgcaat acttcacata caacttgagg gttacagaat ccagattaag 60
cctctgttct ggaaggatta tcacagaaac ccacatttac ttatttcaga gggggtcatc 120
tgcttccccc ctgcccttcc tctaataaaa cttcaaaaaa acagaatatt gtcaggccgg 180
acgcggtggc tcatgcctgt aatcccagca ctttgggagg ccgaggcagg cacatcacct 240
gaggtcatta ctgacttcta gaccagcctg gccaatatgg agaaaccctg actctactaa 300
aaatacaaaa attagctggg cgcggtggca tgg 333

<210> 261
<211> 339
<212> DNA
<213> Homo sapiens

<400> 261
agaatgtctg ggtcactccc agggtgtaaa attagcacag cccagcatcc tcacttaggt 60
gagggacagg gacgtcgagt cacctggtaa gactccctgc aaaagaacaa aagtggccac 120
ctgcttaggg ctggtgaaga agctgttaaa gtggatgagg tgctgtatat agaattataa 180
attgtgtcat cccaaggaga acacttaaac aaaaagaatt ttcagtccac tgtaaaaata 240
tgaggaggca agttaaattg gataactctg gaatgggtag aaagatgtca taataacgca 300
cacatgcaca cggatactcc caccactgag tgttacccc 339

<210> 262
<211> 337
<212> DNA
<213> Homo sapiens

<400> 262
ggcagtcact gagctggttc cttcccacca cattggggtg ctcttgcctg gcctgcctgt 60
gttaggcagt cactgagctg gttccttccc accacattgg ggtgctcttg cctggcctgc 120
ctgtgttgca ggggggcggt gtcagaggag acaacatgaa agtgctggga aagctggata 180
caaacacaag ctgttgtttc taatcaaagt taaaactggc tttatgctaa aggagtcttt 240
agtgcctccc aaaaaagtga gaacagtatt tttccagggg cttctatgac ctgctgacct 300
ttcttccaag acatccgtga gatttttctt attagag 337

<210> 263
<211> 339
<212> DNA
<213> Homo sapiens

<400> 263
gagaccaata cttccatgct gtcttcaagc cctgcttcct gcacatctcc cagcccagat 60
ggggagaacc catgtaagaa ggtccactgg gcttctggga ggagaaggac atcatccaca 120
ggctcagagt ccaagtccca cccggactcc tccaagatac ccaggtcccg gagacccagc 180
cgcctgacag tgaagtatga ccggggccag ctccagcgct ggctggagat ggagcaatgg 240
gtggatgctc aagttcagga gctcttccag gatcaagcaa ccccttctga gcctgagatt 300
gacctggaag ctctcatgga tctatccaca gaggagcat 339

<210> 264
<211> 338
<212> DNA
<213> Homo sapiens

<400> 264
acattccgtc tccagacctg gcattcttac tcacagctaa gcaagaatag atggttactt 60
tgcaaaccat caagtactat acaacataag gtaattatga aagtcagaga gagtatatga 120
cttctatagt tccacaactg attactcaaa tacaagaaca gaaccagttc aaccctattt 180
ccacagactt cttcgtcaat caaatgagga tgatgtttcc tattacaggc caccaaacat 240
tttagtaagt atgtaaataa tgacaaaagt gtatggccag gccgggcacg gtggctcatg 300
cctgtaatcc caacactttg ggaggccaag gcaggtgg 338

<210> 265
<211> 369
<212> DNA
<213> Homo sapiens

<400> 265
tacggctgtt agatgacgac agaagggtgt gtgagagtgt gggttgtgtg agatacatgt 60
gtatgtgagt gtatgagtgt gtgagtgaat atgtgtgtgt aggaatgtgt gtgtaagtga 120
ccttgtgagt gtgtaatgag tgtgtgtgag ggtgtgcgag tgtatgagtg agcatgtgag 180
tgtgtagtgt gtgtaatgag tgtgtgcgtg catgcatggg catgtgagtg tgtgagtaca 240
agtgagtgtg tgagtgattg taagagtgtg tgatgagtgt gagcatgtgt gagtgtgggg 300
gattgtatga gtgggtgtga acatctgtgt gagttttggg gtttatgaat gtgggatgag 360
aattgtggt 369

<210> 266
<211> 365
<212> DNA
<213> Homo sapiens

<400> 266
tacggctgct acaagacaac agaagggact acacggtctg tgccggaaca agagtcttgc 60
tcttgactgg ttaacctgcc ttgaatcagg gcattcaggg agacctcaga caggtctgca 120
ttgacctatc tccacgcaca aggggcagca ttagttagcc cactgtcctc agggcttcca 180
gcaatgagac agctctgtca agagaggcac tgaagagtaa aagtggttgc ttgttcaacg 240
gctttcaatg ggattgctgc tgaacatgag actcactgaa atgccgatgt taatatgttt 300
gataactcca aatccatcag gcttgctaag gaataagaga tgtccaaggt ttgcggtgga 360
gaatt 365

<210> 267
<211> 342
<212> DNA
<213> Homo sapiens

<400> 267
tgtgtgtgtg tgtgtgtgtg tcccaagggg tgtgtgggtg tgtgtgtgtc ccaaggtgtg 60
tgtgtgtccc aatggcagcc tcagggaaaa ctgagcaaag aatgaatttt gacattgctt 120
gggagagcag aaaaggttct atgaggagga tgcaggtctc agacattcca gcataagaca 180
gatgagccaa ccttaagtcc cagacagagt ggaggagatt ctattcccgc ccctaccctg 240
aggctgattg tcccagttcc agaagggact cccaggaaaa tccagcctgg agaggctgcg 300
cccggagcaa ttaagaacag gacaaggcca gcaagtggtt tt 342

<210> 268
<211> 338
<212> DNA
<213> Homo sapiens

<400> 268
gagggaggat cacttgagcc caggtattcg agaccagtca gaacaatatg gtgagatccc 60
cttctctagt tctttctttc ttatttttt ggcgagaggg ggactgagtc tcgctctgtc 120
gcccacactg acctttattc atacgtacaa aacttcacac agcacgttcc tgagcctgcc 180
ccacttcgtg gcctacctta acggaattat accaaaccat acctttggac accggcagct 240
ctaactcaaa actggcagtc acccgttcac ccctttgag gaatgcatcc cacttccaca 300
ggacctttac cgcgttccat ccccctgcct tcgttttg 338

<210> 269
<211> 339
<212> DNA
<213> Homo sapiens

<400> 269
ttgggagtca acagagtgat ggagcctgtc ctgtccttgc acttgatctc cacattcata 60
gtgtagccct cggccttgac atttaatgtc acagggtgga ctttctttc cacattgcag 120
atcaaattaa agttcgcatc tccttgctgc tttggagtga agaaaatatc aattgggaac 180
ctggttgggg aacaaaacag cagattacct gactaggcca acttgtcaaa accttaaaaa 240
atatgagcct actgaattag cagattcatt acgaggaaaa ggaaactcca aattatgatg 300
acatttaag atttgtggct atagtaacca aaacagcgt 339

<210> 270
<211> 331
<212> DNA
<213> Homo sapiens

<400> 270
atggccctac ccactgctgc tttggtccag gagcattgat gcttctcggc tctcctctct 60
cccctaggcc tgcaggacaa gctgaacaag agggactaag aggtgacagc cttgacctcc 120

cagaccgaga tgctcatggc ccaagtaagg ggtaaggctc cctcccgtag ggcagatgcg 180
gggggctttc actggggccg tgccattcag ctgccaatta agcatggagt gggtcagggc 240
ctggcttagg gtcccctccc cgactctgct ttgagaagaa aagggctggc tggtcgcggt 300
ggctcgcgcc tgtaatccca gcactttggg a 331

<210> 271
<211> 235
<212> DNA
<213> Homo sapiens

<400> 271
cttctgttgt agccctaggc aatctcgagc cacagagacg tccccgctga cgagaaggaa 60
gtcctacgac cgagggcagc ccattaggtg agatcatgtt ctagaatctg ctccagagtc 120
accaccagtc tagttcttgg ttacatgagt ggctatgatg ttctgctctg ttgatcatct 180
tgtacacagt gtaacctggg ccagcttgac tgagccattc aggttcaccc agtgg 235

<210> 272
<211> 151
<212> DNA
<213> Homo sapiens

<400> 272
gctgtcgacg tgttcttccg gtggcggagc ggcggattag ccttcgcggg gcaaaatgga 60
gctcgaggcc atgagcagat ataccagccc agtgaaccca gctgtcttcc cccatctgaa 120
cgtggtgctt ttggccattg gcatgttctt c 151

<210> 273
<211> 325
<212> DNA
<213> Homo sapiens

<400> 273
gctcataaaa ctgctgatag gaaagagtta taggtctcac tgttcaagag gcttgggttt 60
taaagtcata ttagcctcaa gagataaggt cttggggtcc ttaagagtcc agtggttaga 120
aatgagatgt ctgcagttag acctcttaac atcatcacgg atatatttgt gtttaatccc 180
agcactttgg gaggccgagg cgggtggatc acctgaggtc aggagttcaa gaccagcctg 240
gccaacgtgg tgaaacccca tctctactaa aaatacaaaa ttagctgttt gtggtggcgt 300
gcacctgtaa tcccagcaac ttggg 325

<210> 274
<211> 322
<212> DNA
<213> Homo sapiens

<400> 274
gaaagtctac ggagcatttt ctggggaata taattttaaa ataagattaa atatcacata 60
aaataaatac aaaactagat agtaaaattc tgaaaaaaaa aaagaataag cctgaccaga 120
tactacactg aattgcaaaa tcattgatat ggttggaaac aggggcaaaa aaagcagaca 180
tgtcaattga gtaaaataga gcatactgaa ctagggtaaa ctcacatgag aatttaataa 240
ataataaagg gggcttttaa atgaggggga taaagaagaa ttatttaata aagggggttt 300
gggtcaatgg gctagccatg gg 322

<210> 275
<211> 135
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(135)
<223> n = A,T,C or G

<400> 275
aaactctgtt ttaggataag tcactaatat agagatagct agttcaattg tgtctggctt 60
cctatcacat cactagcact tagtacagaa ttggggtcct aaaaatattt ggcaatgatg 120
acctgtgttg ctttn 135

<210> 276
<211> 327
<212> DNA
<213> Homo sapiens

<400> 276
gaccaaaata caagttcaat gaatgacgca gcagctctga gaggaacata aggaaaacac 60
ccaagccgga gtctctcaca agcttgaatg tgtgttctgg agctgaagga tgcacggttg 120
ttaagcccct gttcttttcc gttgtttaat ctaatgttct ttggaataaa aacctccctg 180
ccaagtagta cttggtttta tgctcaacat gctttgactg ttgaaaagag acctttggca 240
cacattgaag ggatggtgat ggagatgcca atccatggaa tcaggtggca cagctatgtt 300
ggtagctata gcagaagtct tcttggg 327

<210> 277
<211> 328
<212> DNA
<213> Homo sapiens

<400> 277
tattaataat gctaaacact taccagcttt gtaactttag ctatctatca ccattgagtt 60
gtttcctaat ctataaaatg gtggtaatcc ctcatacgac tgtggaactg atgaaataat 120
atggcatatg taaacatttg gttcaagacc tgctacattg gatgaggaat gtcaacagta 180
aagtaaaatt ttgatctttg agtgtgtagt gagcttgtta tgtcactttc tgtggattct 240
atttgacact cataaagaaa aactctaggt ttaaaaatgg aactaggcca ggcgcagtgg 300
ctcacaccta taaccccagc actttggg 328

<210> 278
<211> 329
<212> DNA
<213> Homo sapiens

<400> 278
atttgtaact cacagggcag aataacagct ctagagctca atttatctgg aggagattca 60
gcacacctgc ttctcttttt ccactggcat ggctcttggt gcaaatttgt atttatgtaa 120
tagttagaaa ttaaacatca gcaccaacgg aaaaatattc aacgcccttt attaaacatc 180
aaacaacttt gtcaatggga aaagctgccc caactggttt agatcttacc tttcaacatt 240
gttgtcaaag tacctttcca ctctctggta atgtctttga gagggtttgc ttattggacc 300
tacaactatc ttcccggatg gagttgcct 329

<210> 279
<211> 303
<212> DNA
<213> Homo sapiens

<400> 279
cggggcgtga acccgggagg tggagcttgc agtgagccga gatcgcgcca ctgcactcca 60
gcctgagtga cagagcgaaa ctctgtccca aaaaaaaaaa aaaaaaaaaa aaaaaaaggg 120

ggggggtttt ttcgtaaacc ccaacgtgaa aaaaaccttt ggggggttgg gcacaccccc 180
ccttaaaggg gggggaaaaa aaggcttttt ttggaaaatt gggggggctt ttgttttttt 240
ttgaaccctt taaggcggca aaaaacaggt taaccaccac ctttggtttt tttttagggt 300
gga 303

<210> 280
<211> 328
<212> DNA
<213> Homo sapiens

<400> 280
gagccaccac tcctggccca aagtcaatac attttaaaaa aaaacctctc cagtggctaa 60
gcccagcatt gttatatgat taataaataa aatattgaca tcgagggttg acaaacctag 120
tacttttcc tgaaatcttc agtgctgtct gtgagtatat ttgcactgtt atgtaccagc 180
aactgtgcac ataacaactg gtatgatcaa taagacatag tcctcgccag ggccaggtgc 240
agtaactcat gcctgtaatc ccagcacttt gggaggccga ggcaggcaga tcacttgaag 300
tcaggagttc gagaccggcc ttgccaag 328

<210> 281
<211> 297
<212> DNA
<213> Homo sapiens

<400> 281
gtagaagcta tatgttgtta ttgtattgct atttatctac ttaaataact cttactgtag 60
tatgtattgc tcaaggacag agattgtgtt gctcatcttt gtgttatccc acttagcata 120
gtttctaagc aaatagtata gttctttcat atatgcttat caagtaaatg aatttgactc 180
tacctcctaa tgaactattc agaaattcat gtttacgatt ttagcaatga gaacaccaag 240
acttagcaat agagtatcaa agataataca actagggagt agatctaaaa taagaaa 297

<210> 282
<211> 277
<212> DNA
<213> Homo sapiens

<400> 282
atccacgtga tactaagtgt aaacccctac gcttgtaact cttactcaac cattaacgac 60
cgcaacaaag caaattaaaa gaacattacg attccagcaa cattcaggtg aacatgaatg 120
tgctcttcac tgttttactg atatggaatt gctacaacgt gaaggtcttg actgttagtg 180
gcccacccac ttttgagttt aagcaaacta gattcacttg ctgtgggatg acctgatgct 240
cttctgccac ttttcaaata actacaaagg ctttgtt 277

<210> 283
<211> 298
<212> DNA
<213> Homo sapiens

<400> 283
ggaaaggagg tagaaggatg agaccctaac acctggtttc tccttccact tcaggcattt 60
gtcagattct tggactgcat tgagtagggg aataagaagt tgggcagaaa tcccctaaca 120
tatgtcctgg tttctcaggg ctaaagagga aaacactgaa tttcaaggcc caaccaagtc 180
aagggccccc ttagtaaata cactacactt tgggctgggt gacctcaagg tccacaccta 240
aggtaacatc aaggcgatcc agaagtagat cttaaatgta gctcaatctt ggctgggc 298

<210> 284
<211> 326
<212> DNA

<213> Homo sapiens

<400> 284
agagacaggg tttcaccatg ttggccagga tggtctcaat ctcttgacct tgtgatccac 60
cctcctcagc ctcccaaagt gctgggatta caggcatgag tcaccatgcc tggcccacag 120
tgacccttta aaggaaaatg ggagggacct acctcggagg ttgtgcagaa aatgttggct 180
tccccagcac tagggtttgg ttccctccta ggtcctccca cagctgtgct ttgacacata 240
agcagcttct attaaagtgc ctctttaatt tgtctgtcat tgccaccaga ccacaagata 300
ctttggggca gggctgtatt tcattg 326

<210> 285
<211> 328
<212> DNA
<213> Homo sapiens

<400> 285
gtatttatta agtatttacc ctgaaataag tactgcacga agcatattca ttcagtattg 60
tccagttgct cttagcatga agtcactggt gtcaccttga tggcagtgat gagacaaatt 120
acttgtttca cctctttaaa catcagatag attgctgggg acaaagagac agcatggctt 180
ccaaccatta cacaagtccc ccttctgcag ccaggatcat gtctaggatg atgcagttat 240
ggaagacagc atgctgagtt tctattaatt tgatgaatca ccaaattgag accagtggtg 300
gtggtgtcca aggacaaagt gaattgtg 328

<210> 286
<211> 328
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 286
ggcagcatga atcataattg tcaggaaaaa cttcatagat tccgctatag tatctccggt 60
attgtatcag gacaatctat aagacatttg gagctacacc agttgaaagg tattggctca 120
gtcagccccc ttattcagtt ttgtaaatta gggggccact tgaagaaaat tctatggttt 180
atgctaatac acatgtagct gaaaatataa ttacatttaa aatctgttga atttaaattt 240
actacagttt tttttaaaga tcatgctatc cttcagtcag tcttgcagca attttccaac 300
tcaatgtaga actaccaatg aaaagtgn 328

<210> 287
<211> 331
<212> DNA
<213> Homo sapiens

<400> 287
tgagcttttc attacattgt tgaaagatga agaacgaaag ctacttgttg atcagatgag 60
gaagagatcc cctagagtaa atctgtgcat taaacctgta acttcatttt atgatatccc 120
aggttagctc tctagtcggc cagccaaaat gttggcatgt tttgcccctc tattcaaatt 180
aaccttgaaa tatatttgag gattctctct tgttttaatt aacacttgtg ttggtaatta 240
atagaaattc acctgtcttc cgtatcagat ttctgtataa gcagttatgc tctggagctc 300
tgccaagcca atgattagta cagattcagt c 331

<210> 288
<211> 329
<212> DNA

<213> Homo sapiens

<400> 288
agttttcata ttccttagtg ttatcacact ggtgcactta ctgttttacc attttccctt 60
ccgatttcat ttttctgtta gcatttacta ctatctaaca tatattttac tcatttgtct 120
gtgttcccca tcagaatata acttcatgag gggagggatt ttctattaca cttagtgaaa 180
agtaaatccc tcaagtagga acactacaag tatgcacagt tttttttta cagtaagttt 240
gcttaatggc tagtaaacta tctcagccag tacctgagtg actattctga cttgtatcat 300
ttaacaagaa aaaaggcctg gcgcgctgg 329

<210> 289
<211> 301
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 289
tcacaatgct ttatattttt cagagaatat ttgcattcat tacatcaact gcaattcata 60
gggattctgt gagctgatat gtcattacat tacttctcag gtgaataatt tagtggactt 120
attaaaaatt agaaaaaatt agaaaccagg catggtggct catgcctgta atcccagcac 180
tttgggaggc tgaggcgggt ggttcacctg aggtcaggag ttcgagacta gcctggccaa 240
catgatgaaa ccccatctat actaaaaata caaaaattag ctgggtgtga tggcatgccc 300
n 301

<210> 290
<211> 328
<212> DNA
<213> Homo sapiens

<400> 290
gaggaagagg ctggggaccg cggcgaaggt ggtgagtgct cttgggcgcc ttctcccaac 60
gtccctgcca gactcgcctc cgggctgatt ctccagttgg tttcctggac tccagagtag 120
ctgtccggcc tggccccgga ggtgcaaagt aagaaaattg aagtcaaaga ccatgggaga 180
tacagcaaaa ccttatttcg tgaagcgcac taaagaccgg gggactatgg atgatgatga 240
cttcagaagg ggtcaccccc aacaagatta tttaataata gatgaccatg ctaaaggcca 300
tggcagtaaa atggaaaagg gccttcaa 328

<210> 291
<211> 326
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(326)
<223> n = A,T,C or G

<400> 291
ggacgttgct gacggctagt gaggctttag cccgcttcga gcgcccgggg gcggtaaggc 60
gcgatcatag cagctctagg tgaccttggt ccggctcctt gcgcccccct gccccagcct 120
ccttcgttga gacactattt gttgagtctt tcctcttttc ctggccctga cctagcgtgg 180
ggcgacataa gagcaatagc cgggtggggg ctgtgagaac ggctggggtt gggagcgaat 240
ttcggaaacc cggaggacga gtatagcctt gcaagatgga aaatgccctc ccgggctggc 300

gcggtggcct gtaatcccac ctactn 326

<210> 292
<211> 324
<212> DNA
<213> Homo sapiens

<400> 292
aaaaatccta acggctcaaa gaagtttgct aagggtcagg aagcagggga tacacgggcc 60
tctcctaccc gtgtaggagg caggaagggt caaagcagag gccagctctc ccagactgtg 120
ggggaagggc tgggggggag aggcccacga ggactggcca cagccaccat gcaggaacgt 180
cctggtgtgg cctggcctgg ctctcacaga cccaaagctt ccgtggagaa tatgtctgtg 240
gttattaaac agacaggcct agtggaaaca accctgccac ctgcgtgttc tctgagcctc 300
agtttctttc tttgggaaag agga 324

<210> 293
<211> 319
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(319)
<223> n = A,T,C or G

<400> 293
ttatgcggct gattaaaacg tcctaaactt agattgtggt gatggttgca aaaccttgtg 60
actacattaa aaagcattga attgcacact ttgggtgggt gaactttatg gtatgtaagt 120
tatatctcaa taaaaaattt tataaactgg tttattccaa tggtagactg aaacaaaatg 180
aaagtgtaac atattttgaa cttcaattga attataaggt ctttttttta catgataaaa 240
taatgtgcat tatagcccaa atgtaataca ttattcaatg atatatttcc aagaatgctc 300
cttagctcag tgaatgagn 319

<210> 294
<211> 318
<212> DNA
<213> Homo sapiens

<400> 294
ttttagtgta gtagtcaaag cattaatttc tcacattgca atttccttca aagacataaa 60
tacaaccttt ctaatgactc cttgttcatc aagatacctc ttcaaattat tctatttgtt 120
tcattcagta tattatctgt gtataccgat attacactct tttctttttt tgagatggaa 180
tctcattctg ttactgatgc tggagtgagg tggcatgacc tcggttcact gcaacctcca 240
cctcccaggt tcaagcgatt ctcctgtctc agccccccaa gtagctagga ctacaggtgc 300
acaccaccat gcctggct 318

<210> 295
<211> 322
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(322)
<223> n = A,T,C or G

<400> 295

gatgctttgt accagtacca aaatacaagt tcaatgaatg acgcagcagc tctgagagga 60
acataaggaa aacacccaag ccggagtctc tcacaagctt gaatgtgtgt tctggagctg 120
aaggatgcac ggttgttaag cccctgttct tttccgttgt ttaatctaat gttctttgga 180
ataaaaacct ccctgccaag tagtacttgg ttttatgctc aacatgcttt gactgttgaa 240
aagagacctt tggcacacat tgaagggatg gtgatggaga tgccaatcca tggaatcagg 300
tggcacagct atgttggtag cn 322

<210> 296
<211> 318
<212> DNA
<213> Homo sapiens

<400> 296
cttgagcacg cacacaccac ttcttcaatg ggtgtgaact agtgcatggt taaccttgta 60
ggtgacaaaa aggctttgtt tgtctgcatg atcatctctg ggaagcggcc agcgctctaa 120
atttgaatga ggatcttcac tgaagctcat acttataatc aaggagatca ctgctaagaa 180
cgggaatttg tcctgcgttc tgggactaac atacagagag catctgattt cagtcacggt 240
ttgccactac cctataatga gagcagtctt atgttataaa agaacgaagc caactatatt 300
ctctgacgga taaacatt 318

<210> 297
<211> 317
<212> DNA
<213> Homo sapiens

<400> 297
caaaaataaa ataaaataaa ttagctgggc gtggtgacgc acacctgtag tcccagctac 60
ttcagaggcc gaggtgggag gatcacttga tcctgggagg tggaggttgt tgcgaactga 120
tatggcgcca ctgcccttca tcctgggtga cttagtgata cccccagctc taaaagtctt 180
catgtatacc ttatctagga tgaatggatt cttatgcata ctgggcatac atgtagagct 240
ttgccgcatt gacctattgt ttacgaatct aatacacgat gtggatcctg gggctgaaca 300
cttaattgat tagggag 317

<210> 298
<211> 323
<212> DNA
<213> Homo sapiens

<400> 298
gctcataaaa ctgctgatag gaaagagtta taggtctcac tgttcaagag gcttgggttt 60
taaagtcata ttagcctcaa gagataaggt cttggggtcc ttaagagtcc agtggttaga 120
aatgagatgt ctgcagttag acctcttaac atcatcacgg atatatttgt gtttaatccc 180
agcactttgg gaggccgagg cgggtggatc acctgaggtc aggagttcaa gaccagcctg 240
gccaacgtgg tgaaacccca tctctactaa aaatacaaaa ttagctgttt gtggtggcgt 300
gcacctgtaa tcccagcaac ttg 323

<210> 299
<211> 320
<212> DNA
<213> Homo sapiens

<400> 299
gttcaccatg ttggtcaggc tggtcttgaa ctcctgactt caggtgatcc acccgtcttg 60
gcctcccaaa gtgctgggat tacaggcgtg agcccaccgc gcctggcttc ggaattgcat 120
cttaatctct gtggcggctg ctattttgtc ttctaagttc atgagcacag gtggctgcct 180
ctatctttct cctccactta agcaggaaca attcatgagg cagactccac ccaatgctgc 240
aaatcggccc tattatcatt gaccctgaca gaatttcagg agtgtcaggc cactccatac 300

tggaaacagt acagggttgt 320

<210> 300
<211> 318
<212> DNA
<213> Homo sapiens

<400> 300
gatgctttgt accagtacca aaatacaact tcaatgaatg acgcagcagc tctgagagga 60
acataaggaa aacacccaag ccggagtctc tcacaagctt gaatgtgtgt tctggagctg 120
aaggatgcac ggttgttaag cccctgttct tttccgttgt ttaatctaat gttctttgga 180
ataaaaacct ccctgccaag tagtacttgg ttttatgctc aacatgcttt gactgttgaa 240
aagagacctt tggcacacat tgaagggatg gtgatggaga tgccaatcca tggaatcaag 300
tggcacagct atgttggt 318

<210> 301
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 301
ccttgctaac tttatttcag aaagtggtaa aatagctatg gagtacagac ccagtgaaga 60
gattgtagat gtcagatggg aagaagaact acacggttta atataagtat gtggagataa 120
aaactcaaag gtaacagggc cgggcacagt ggctcacacc tgtaatgcca gtgctttggg 180
aggctgaggc gggtggatca cctgaggtca ggagttcaag atcagactga ccaacatgga 240
gaaatggtgg cacatgcctg taatcccagc tactcgggag gctgaggcag gagaatcgct 300
tggacccggg aagcggn 317

<210> 302
<211> 346
<212> DNA
<213> Homo sapiens

<400> 302
taccgctgcg agaatacgac agaacggcca tctttctacc atatgctagt aatatatggc 60
tggaatgctg gtatgggaat tactcccctc tttgctgaaa tagttcatct cttgtgtcct 120
tttccccttt ttattcttct attcttctta gcctaagtga tggctgcgat tggattcaca 180
aggttgatat tcctactcgg ctcatgtcca cccacaagca gagaggagcc catcatcatc 240
atttgttctg aatctgaatc ccaagcacga aaaataactc caaggctctt acttaagctt 300
gcgagtctgc tctgtcatgc ggagagtcca ccaccctgac tggatg 346

<210> 303
<211> 322
<212> DNA
<213> Homo sapiens

<400> 303
tagttgatgt gcccatctgc cccacctctg cctggctgta cttgtagcta gtacatgtat 60
actatatatg tgcccgactg tttcattgta tgttccagga tggtcatgcc tgagtttttt 120
ttttttttt ggggggggt attctacttt ttttgcccgc tttgaagtgc ggacccataa 180
taacgtttta aagcctcaaa attttaacct taaggggatt aacctattta atccttttgg 240
tttgtgggtg cttggtacct gccctaccag gcgggggaat tttttaaaaa ttttttgaaa 300

aaagggaatt ttaagttctt ct 322

<210> 304
<211> 316
<212> DNA
<213> Homo sapiens

<400> 304
aagttgacct catcacctca gaaaatcagg gataaaatct gtctttatat tgtttcaggg 60
acttgggtat cagagacatt atttgtttat caagacctaa caaaacactt tcttattctt 120
taaaatttct gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgagaatat tattaccttt 180
cacagagctc ttttttaaac cttgatgtgg aacgcacaca gtgtgacacc atgtgtgcgc 240
cccttcacac tcgaaacgct tataggattc attcagactc tttttaaagc acaacattgg 300
ggcagagaaa gccacc 316

<210> 305
<211> 289
<212> DNA
<213> Homo sapiens

<400> 305
tcacaatgct ttatattttt cagagaatat ttgcattcat tacatcaact gcaattcata 60
gggattctgt gagctgatat gtcattacat tacttctcag gtgaataatt tagtggactt 120
attaaaaatt agaaaaaatt agaaaccagg catggtggct catgcctgta atcccagcac 180
tttgggaggc tgaggcgggt ggttcacctg aggtcaggag ttcgagacta gcctggccaa 240
catgatgaaa ccccatctat actaaaaata caaaaattag ctgggtgtg 289

<210> 306
<211> 315
<212> DNA
<213> Homo sapiens

<400> 306
tagtcccttg ttctgaacat ggtactgaac gtaaactttg atgtattgat gccctccagg 60
gctgtaaaat tgtgtggggt ttaccttatt ctttcactga attttaccaa ccattttgcc 120
agagtgtttg gcgctgacat tgatattctc gggcctcttg aagtgtatag agccctttgc 180
ccccaggcta acatgcctta catggctgta ctgctctgca tagtgctttt cctgtgccct 240
cttgtgattg cctctgttct ctatgggcac tcctcattct tgttggtggc taccttttgt 300
cccaacaacc tgacg 315

<210> 307
<211> 287
<212> DNA
<213> Homo sapiens

<400> 307
tcttgggcgc cttctcccaa cgtccctgcc atactcgcct ccgggctgat tctccagttg 60
gtttcctgga ctccagagta gctgtccggc ctggccccgg aggtgcaaag taagaaaatt 120
gaagtcaaag accatgggag atacagcaaa accttatttc gtgaagcgca ctaaagaccg 180
ggggactatg gatgatgatg acttcagaag gggtcacccc caacaagatt atttaataat 240
agatgaccat gctaaaggcc atggcagtaa aatggaaaag ggccttc 287

<210> 308
<211> 207
<212> DNA
<213> Homo sapiens

<400> 308
cagggcagcc tgcaaccaca caggttgcat cccatgaagc tggccccgga tatgtgtgac 60
ttgctgtcac ttttggcttc aacaacagac aacttgactc aaaatggctt gaggggactt 120
actacttcat gccaagagaa gcctggaggt agggcaggtc cagccacggt tggttaaaat 180
tcagctgcca aaccatgcca tgaaggg 207

<210> 309
<211> 319
<212> DNA
<213> Homo sapiens

<400> 309
gagaggaggc tcagggaaag gtgaaagatg ctatgggctg gttaactctg caaaaggaaa 60
aactacagaa gttgctaaag gattcagaga atgataccta ctttaaaaag tataatagcc 120
tgctgtcctt tatggagtca ttcaatgaag aaaaaaagtc ctttttggat gtcctgtcaa 180
taaaacggga tctggatgag ctggacaagg atcatttaca gttgagagaa gcctgggatg 240
gcctcgatca ccagattaat gcatggaaaa taaagctaaa ttatgtcttg cccccacccc 300
tccatcaaac tgaagcttg 319

<210> 310
<211> 315
<212> DNA
<213> Homo sapiens

<400> 310
atttgcaaat tttggggctg catgtgaggc tgggaaggtt gacccagagc ttctaaagta 60
caaaatgaaa tctctcacaa cctgatggta tttggatagc atatacccac cagaggaaca 120
ggcttttatc tagcatacca caggtctccc ctttagcaca tctgtgctca ttttgaaact 180
gtatagggaa ggacattagg tggctgggag aactctgaag gacagacctg gatctcctgc 240
caccttccaa aggtgaaaca acaaaaatcc gccaggcttt cagtcagaag cccggaaggg 300
ccactcccaa ggaac 315

<210> 311
<211> 323
<212> DNA
<213> Homo sapiens

<400> 311
aagttttgga gagggggggg tctcactatg ttgcccaggt tggtcttgaa ctcctaggct 60
gaagcgatcc tcccaccttg acctcccaaa gtgctgggat tacagttgtg agccaccgca 120
cccggcctag tctttaaatt tagagcctca ttgatataaa gggcgaagaa aattaagtgt 180
tgtaaccagg tagcccggtg tccaggagaa tgatggatct gtcagaaatc catgggtggt 240
ttcgagcttt ggtcccatct tggactcaat cgttcatggc cagacgcctg gcaaggagcc 300
caaactacgc cagaagtgga cct 323

<210> 312
<211> 219
<212> DNA
<213> Homo sapiens

<400> 312
tgggtacggc tcgcaaaaac cacacaagcg gtccggttgg aaaacaccac ccaaggggtc 60
cggtgggaaa acaccacata agggtgcccg tggtaaaaca ccacataagg ggacgggtgg 120
gataacacca cagatgggga cggctgctat aatacgacag atgggcacgg ctgccataaa 180
accacataag gagaccgcct gttattagac cacataagg 219

<210> 313

<211> 160
<212> DNA
<213> Homo sapiens

<400> 313
gttatctgaa attcaggcac tgcatgcaca aatgaatggt aggaaaatta ctctgaatgg 60
agaacgagag agtgagaaac caagccaaga actcttggaa tataatatac agcagaagca 120
ggctcaaatg ctggagatgc aagtggagct tacaagtatg 160

<210> 314
<211> 308
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(308)
<223> n = A,T,C or G

<400> 314
ggaagttagt gcttaagggt aatagacttt tttcttttct tttcttttng agacagagtc 60
ttgctctttt gcccaggctg gagttcagng ncgcaatctc ggctcactgc agcctccgct 120
tcccaggtgc aggcgatcct ccttgctcct cacaggggag gctaggcagg ataattcgtt 180
ttccaggagc cctctcttgg gggaaacacc tattttcccc ttaacatttg ggggaacaaa 240
aagggagttc ccgttaaaca ttgttgcgtg gggatgaggc gcccacattg gctcccttac 300
cctccgtg 308

<210> 315
<211> 310
<212> DNA
<213> Homo sapiens

<400> 315
aaatgcctgc agggaccccc ggactagaca gccctcagcc ttcatggggc cgggggggcag 60
tgggcagctg ctcttgaaca acaggcaatt gttaccttgc aagaaagcag gctcagcgtg 120
tcagacactc ctgcttttca agagaagctg gaagttcagg accagcctgg ccaacacggt 180
gaaactcgat ctctactaaa aatacaaaaa ttagcggggc gtggtggcgc atgcctgtaa 240
tcccagctac ttgggaggct ggggcaggag aatcgcttga acctgggagg cagaagttgc 300
agtgagccga 310

<210> 316
<211> 311
<212> DNA
<213> Homo sapiens

<400> 316
ccttgctaac tttatttcag aaagtggtaa aatagctatg gagtacagac ccagtgaaga 60
gattgtagat gtcagatggg aagaagaact acacggttta atataagtat gtggagataa 120
aaactcaaag gtaacagggc cgggcacagt ggctcacacc tgtaatgcca gtgctttggg 180
aggctgaggc gggtggatca cctgaggtca ggagttcaag atcagactga ccaacatgga 240
gaaatggtgg cacatgcctg taatcccagc tactcgggag gctgaggcag gagaatcgct 300
tggacccggg a 311

<210> 317
<211> 261
<212> DNA
<213> Homo sapiens

<400> 317
agacaaaact attattcaac tcaacagggg gccttttttt tctatacccc cagccttgta 60
aaaacccttt ggtgggtggg cccacccccc acttagatgg ttgggaaaaa ttggtttttt 120
tggaaacttg ggggcgccct tggttttttt ggacccctta ataggtggcg aaaaccggct 180
acccccccgcc gtgggtttct tttttatttc cagggctcgg gggggggggg gggggtggat 240
cacctgagat caggagttca g 261

<210> 318
<211> 310
<212> DNA
<213> Homo sapiens

<400> 318
ccaccatgac tggcaaattt tcgtattata agtagagata gggtttctcc atgttggtca 60
gactggtctt gaactcccgc cctcaggtga tctgcccgcc tctgcctccc aaaatgctga 120
gattacagat gtgagccact gtgcccggct gcctgagaca ttttgggcaa cagccgtgac 180
agaagaaacg tgcatccctt ctgtgcaggg gatttaagaa gtggctcatg gctgattatg 240
atttctttgc tccgtttctg gaactgcggg agcatcttct gggataaggg tctatctgtt 300
tgagtctctg 310

<210> 319
<211> 307
<212> DNA
<213> Homo sapiens

<400> 319
tgagcagaaa aggatagagt gtgacctgcc aagagatact ggacagtggc ctccactttg 60
tgtacccggg ttggccattc tccttatcgg cacagtcagg ataagaaaac tctaagttta 120
ttcggatccc ttggaggaca cttctacatg ggaacaattg cagctgtcat cttggacttt 180
acttcccagc caactcagtg gggaaagagg ggagcattct ggggacctct gtagaggggc 240
ttcaacctgg atagattccc aatcagagtg aagttcaact tcctccagga tatttcctcc 300
ccctggg 307

<210> 320
<211> 303
<212> DNA
<213> Homo sapiens

<400> 320
ggagcctttg actatgctga gcctcacagt attccaggag gggtatagta agtaacagct 60
ggttctggga ccacttttgc tcagagcatt ctgtggaata tgggtctcca gaacattctc 120
tgagaactat tactcaatct atttaaacac acaaatataa ctctgtataa gagggaggac 180
actggctggc cgtggtggct cacacctgta atcccagcac tttgggaggc tgaggtggac 240
agatcacttc aggcctggag ttggagacca gtctggccaa ctctgtctct actaaaaata 300
caa 303

<210> 321
<211> 295
<212> DNA
<213> Homo sapiens

<400> 321
cattacgccc acactctgca actaacagaa atatctcctc tcccctgtat atgttaggac 60
caagaataaa atcaaacatg tggaggacat gtcagctagc ctgggatttc caagataccc 120
cggttggtaa gaactacttg gggtgccctc atctggagat tctggcttag tagatcagag 180
gtgggcctga taatttatat ccatgagcat accaggtaat tcttataact aagcgagttt 240

tggaaaacac agggctcatc taggccagca aaggtttcct gtcccagagt gggca 295

<210> 322
<211> 304
<212> DNA
<213> Homo sapiens

<400> 322
tgatccatcc actgaattct ctcagagaaa tgagaactca gagccataag cctgctagga 60
atttgcaaga atcttgggaa gtgcttcata atcccccagg tgtagaatgg aggttccagg 120
caatactcta tggacttcaa aatacaggaa gacctcagat gacacaggat acattccaaa 180
tttgcagaac tggactcagt ccattcagtt gaattccaac agttttcaaa tttgttaaag 240
tacaaatatt ttgattcatt gtattaaaaa gtggttatag gccaagcgcg ggggtgcaca 300
ctgg 304

<210> 323
<211> 321
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(321)
<223> n = A,T,C or G

<400> 323
tacggctgca agnnnnnnnn nnnggggagc ttgtccttct catacttcca ctgggagaac 60
tcagggtcca attaaactcc agaaccaggt gagctgcacc ttctcaggta tcaaaacaca 120
gggcccgcca ggcacggtgg ctcacacctg taatcccgta agtttgggag gccgaggcag 180
gtggatcacc tgaggtcagg agttcgagac cagcctggcc aacatggtga aaccgcttct 240
ctattaaaaa tacaaaaaat tggcctggca tggtggctca tgcctgtaat cccagcactt 300
tgggaggccg aggcgggcgg t 321

<210> 324
<211> 286
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(286)
<223> n = A,T,C or G

<400> 324
tgaatatttt gatcaatgaa gtcatacact taacaatagc tatcaatatt gaggagctat 60
aaataaattc taattttcac aaaactcagt aaggtatgta atacaacctc cgctttacaa 120
tgagaaaaat aagtcttact gattcgttga tttaatccat atcagagtta ataacctctt 180
tttcattaaa attggtcctt tagaaacaca cctgcagctg ggcacggcgg ctcacacctg 240
taatcccagc actttgggag gccgagaccg gcggatcacc tgaggn 286

<210> 325
<211> 284
<212> DNA
<213> Homo sapiens

<400> 325
tgagcttttc attacattgt tgaaagatca agaacgaaag ctacttgttg atcagatgag 60

gaagagatcc cctagagtaa atctgtgcat taaacctgta acttcatttt atgatatccc 120
aggttagctc tctagtcggc cagccaaaat gttggcatgt tttgcccctc tattcaaatt 180
aaccttgaaa tatatttgag gattctctct tgttttaatt aacacttgtg ttggtaatta 240
atagaaattc acctgtcttc cgtatcagat ttctgtataa gcag 284

<210> 326
<211> 267
<212> DNA
<213> Homo sapiens

<400> 326
tccaccactc ccacacagca tgcacacacg gttggacctg agtgctcctg atggaaccca 60
ggctgctctg tgccgctgta ggatatcccc ctgcttaagg actttcgttt catctcagac 120
cacatctggc cccgcagttc ctctgatagt ttcccttctg tatcactgag cacatttggg 180
gcagctcgtc cgtgagcatg cagtctgcac gtgtggggtg agggtggggc gcacacaggc 240
tgtgcctgtg ctctggactt gtacaga 267

<210> 327
<211> 465
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(465)
<223> n = A,T,C or G

<400> 327
ccttactcag aaaccacaca agcttgcttg ttgtgtttgg tcgaancggc ctaccgttgc 60
gctaatacaa cagaagggca tctctcttca tgaagggcac atacacacac acagttaagg 120
tgctgaggaa actgggagag ccaatttgac ctggccttta ttttgcacaa gagtaactga 180
agcttcaaat acaatgtgtg ttacatagga accaattatg tatgtaggat taataaagat 240
aggagaccta aggccattta catgagggca agaatagtaa ccttttgatc cagagaggta 300
gtttaaaaaa tagtaaggtg ttaacatata caaataataa agttggggct ttaaacattt 360
gaatttgaag gctctgagtc atgggattaa ctttgtaccc cagggcacag ggaaaggcta 420
cccttgtgca taaggtattg aggaagcttc ctggcagtaa ttccc 465

<210> 328
<211> 417
<212> DNA
<213> Homo sapiens

<400> 328
ggcacgaggc accttacaga cagtggaggg gtgtcccctc ccacaggcaa gaaccagagg 60
cccaggctgc acacccattt cagccatcaa gaacccacac agacggcagg gaaggtggac 120
acagtatgaa ctactgctga tgtctctgtt ggggatcaga gggctggcgg gaacgcgaga 180
agggcaccag cagcattcca cacccagctc ttcctcacct tcctgtctag tttgaatttc 240
ttttttttct ttttcttttt tttttttaa attaaaaaag gaaaaggggg ggtggggaaa 300
aaacctaaaa caaaaaatgg gcattagggc tcaaagcacc cccaggaagg ggcccatgtt 360
tgggggggagc aggggcttgt tgaccccacc tgtttttgtt ttggcacaaa ggtttgg 417

<210> 329
<211> 397
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(397)
<223> n = A,T,C or G

<400> 329
cgttgctgtc gcaagtttga attgtgatga cggntgacgt ttgctgattt ttgactgtgc 60
ttgtagctgc tccccgaact cgccgacttc ctgtcggcgg ccggcactgt aggtgagcgc 120
gagaggacgg aggaaggaag cctgcagaca gacgccttct ccatcccaag gcgcgggcag 180
gtgccgggac gctgggcctg gcggcgtttt cgtcgtgctc agcggtggga ggaggcggaa 240
gaaaccagag cctgggagat taacaggaaa cttccaagat ggaaactttg tctttcccca 300
gatataatgt agctgagatt gtgattcata ttcgcaataa gatcttaaca ggagctgatg 360
gtaaaaacct caccaagaat gatctttatc caaatcc 397

<210> 330
<211> 394
<212> DNA
<213> Homo sapiens

<400> 330
ggcacgaggg acccatttct aggattctaa gatgtaagat ttcttaagtt ctttatctta 60
gtctcatgca ttctccacat cacgcgctgt accatactgt gtagtcagaa cagacagtgt 120
gattgaaaag ctttggaaaa agttaacaca aaggattatt tagcacatag gctgtagata 180
cgtatgtgtg tatttgttca acaattggag atggttgaat acccttgaac aaagtgtgta 240
tcttctcaaa tcagtggttg cactagtcaa taattagaag gtgttgttat ttttaaaact 300
ataagcaaaa ttatgaaggc ctttaaaaaa tctatcataa taatgaaaaa gaggttgtct 360
cccaacagtg ctgtccctca aagaaaagac tggt 394

<210> 331
<211> 377
<212> DNA
<213> Homo sapiens

<400> 331
attatgggcg tgagccacca tgcccggact ctacatcaga aatttcaaaa ggaatttcat 60
agttacaagt tcttcatgag aacaatagct cccagaaaac accttccttg gttccaggtt 120
tacactgaag ttttttcttt ttttttattt cacaacacag attctaggat acactgaagt 180
attaagaaaa atcggggcca ggtgcggggg ctcacgcctg taatcccagc actttgggag 240
gcctaggtgg gcagatcacc tgaggtcagg agttcgagac cagcctgacc aacatggaga 300
aaccccgtct ctactaaaaa tacaaaaaaa aattatccag gcgggggggc gcatgcctgt 360
aatcccaggg actcggg 377

<210> 332
<211> 401
<212> DNA
<213> Homo sapiens

<400> 332
ggcacgagcc gagctcggag gcggtcgtgc ggcgcggagt cctcctggat cgtggcaatg 60
ggcagacaca gagcagaaag tggcggactt gggcggccac aggtaacttt ctcgcaagga 120
gctgaattct ttcactaaag ggtacaagcc cgagggacga gctgcgcgat gattggctgg 180
ggagctccct caggtgagct gccattggca gaggcgcgct caggtaaggc ccttctccaa 240
gtgcaggtaa ctcactccga agtttacctg agtggagcgg cggcatgctt gcagctcggc 300
ggcagcctgt gagagctgag ggtcagttct tcgagtagat ctcaagctgc gttttcctcc 360
ttctccaaag cagggatggg aaggtggagg ctactggttg g 401

<210> 333
<211> 392

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(392)
<223> n = A,T,C or G

<400> 333
cgttgctgtc ggctcaacaa gcatcctagt taaagggctt atcttcatga gtaggtgaca 60
ccacagacat ggtgcttact tcagaattag ctctattatt ttcagaacat tgcttaacat 120
gttggttgag tccggcagac aaattaacat attcttgtgc ataaaaatta gaacaaattt 180
ggtatggcca gtggaaacta tggagtccaa ttgcttttta atctaatttt gatttaagta 240
aatgcagtta tacagaggtt gcaaggaaca gaattgtttt tattttattc tattaagtca 300
tggtataaca tgtatttaaa agattatctg tcttaccaaa tgtacaattt ttgtacaatt 360
attggccttg gaagtagaga tgacagaatt cn 392

<210> 334
<211> 383
<212> DNA
<213> Homo sapiens

<400> 334
cggctacctg ctgacaggat tgcctgatgt caacgtatct gtcttgctaa atgtccttac 60
attgacagct cttatattgt tcataccatc cattacataa atatccacca tcctattatt 120
tggtattaaa actcttcctc aataagaact actttcctgg agcatttctg tgtgcctctc 180
ctggtcatac taagtgcatg tagctttctg cttacgaggg tgagcatttc ctatccctgc 240
tgctgtcttc acagcactta ccccacagaa agatctcagg cactgacaag atatccaatc 300
tcaatgctat gttgtatcaa gcctcatata ttgataaaaa agtcttagtg gcattaattc 360
taaataaatt actattccac acg 383

<210> 335
<211> 404
<212> DNA
<213> Homo sapiens

<400> 335
cttctccatg ctcggaataa cttcctgcat cgttcaacag gctaaagagg gggaaggtct 60
ggaggttgga aagaggactg gaatctgatt ggggttccaa caaatctgta acaccgctgg 120
gaacgactgg gtccccttta ggtcctttag gacagcgttt gaaatcttgc tttcccctgc 180
agggatccag caccggctcc tcctccggca accacggtgg gagcggcgga ggaaatggac 240
ataaacccgg gtgtgaaaag ccagggaatg aagcccgcgg gagcggggaa tctgggattc 300
agaactctga gacgtctcct gggatgttta actttgacac tttctggaag aattttaaat 360
ccaagcctgg gtttcatcaa ctgggatgcc ataaaccagg acct 404

<210> 336
<211> 390
<212> DNA
<213> Homo sapiens

<400> 336
ggcaccagca aagaggaaac agtttagttt tagtggcatg tcctcagtgc aatgctgaat 60
acctaatagt ttttccaaaa ttgggtccag tggtttacgt cttggatctt gcagatagac 120
tgatctcaaa agcctgtcca tttgctgcag caggaataat ggtcggctct atctattgga 180
cagctgtgac ttatggagca gtgacagtga tgcaggttgt aggtcataaa gaaggtctgg 240
atgttatgga gagagctgat cctttattcc ttttaattgg acttcctact attcctgtca 300
tgctgatatt acgcaagatg attcgctggg aggactatgt gcttagactg tggcgcaaat 360

actcgaataa actacaaatt ttaaatagcg 390

<210> 337
<211> 400
<212> DNA
<213> Homo sapiens

<400> 337
cgttgctgtc gcttgggaag aatcccaaca tcgagaaaac ggtgtcctgt gagttccaac 60
aatgcttctt gttcatgggt ttcttccgta tggagtggat taagagtgtt ttattttgtt 120
gttctaactg agaaaaaaag gaggcaccca caaggttgag gtcacacagt ctccacagtt 180
tccaggaggc gtttgggggt ggggaaggca cctccagagc atgaggctct aaggggacat 240
gagtaaagca tgtctgtgac ccagtgagga agggagaggc cagctgcact cctgcacggg 300
gttcctagct gcagaagggt cccgcctatg ccgaggggaa acacctgata gcagaagagg 360
cctggatgca cacctggcac gccgaggctc tccgcccaga 400

<210> 338
<211> 356
<212> DNA
<213> Homo sapiens

<400> 338
cctcagcctg ctgagtagct gggattacag gtgcccacca ccacgcccag ctaatttttg 60
catttgtagt agagatgggg cttcaccatc ctggccggc tggtctcaaa ctcctgacct 120
aaggcgatct gcccgcctca gcctccctga gagctgggat taaaggcgtg agccaccaca 180
cctgggcacc ttatttttt atacggctct actgcataca gttgaataag aaaactattc 240
ctgtattgct gcactttcac actgcttcaa aatcggccta ggagaaacaa tgctttaatt 300
gcttcgggtg catttaattc ctagagccaa cgggcttggc caaaggcaac ctaccc 356

<210> 339
<211> 351
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(351)
<223> n = A,T,C or G

<400> 339
caaactccca agcacaagtg aatcatgggt cagtgactca ttgtgtgaat aggggcacag 60
agaatcccta aaccattgct tttcatatca ggagtccaac agtctttcag gttgcccctg 120
actgagggct ttgagtattt agtggagttt tctggtaaat catagctatt ctaatttagg 180
tttcagccca actagatgct tcctactatc cctggtaagg aatggaactg gctcacagta 240
aatgtagctg tttagtaata gatgcagata ttcttattat cctctctagg gcttctattc 300
tgatttctta tttttaagat taagaattta atggctaaaa aagctaagtg n 351

<210> 340
<211> 381
<212> DNA
<213> Homo sapiens

<400> 340
cgttgctgtc gaacaatgtt acaaaaggca aatataaaga gtatgttttc tttttagtgc 60
tttggaaaaa tttcacttaa actcttatta ctgtatagat taagccctat aatgctattt 120
atattccagg ggaacgaaaa tctgaatttg ttttatgatt taaagcatct ggtttgcata 180
ttgtattgta atactgatac agtttggctg tgtccccacc aaattgaatt gtgttaatag 240

ttcccataat ccctacgtgt tgtgggaggg acccagtggg cagtaattta atcatggtgg 300
tggttaccct catgctgttc ttgtgatggt gagttctcat gagatctgat gggggttttt 360
ttttgttttg gtttttggtt t 381

<210> 341
<211> 344
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(344)
<223> n = A,T,C or G

<400> 341
ggtccagtat gtagcgtaac agccttccaa ccagttagag ccagtgctct ggttggccat 60
tcttgcttta ttgcctaccc tggagttaga ttagcgggtg aggggagatc acttttatct 120
agactgcagg aactgagaat gggtgagggg tgattcccaa atagaaaatg aaggttctgt 180
ttatagaaga ataagaaact atgtttgtct ggtaaaaata gcagttgtcc attctatcag 240
ttttcattcc catgttacag aaattcttac caaacaggct taaatagtaa gcgaatgcct 300
tagttcattt cactggcagt tcagagtggg gggagccctg gggn 344

<210> 342
<211> 374
<212> DNA
<213> Homo sapiens

<400> 342
cggtgctgtc ggaacttttc aacatattga cacccagcgt gtattacaaa cgaaacaggg 60
acagatgaag gcctgcattt gcctgaacgc tatagtttgt tgatccctaa ctagtaaatg 120
gaattcacat ataaccacat ggactttgca ctgcacagaa aaagtcagtt tggggagaat 180
ttcagactta catgtgaagg acagatgtca attttcattt ttatttttatt tttgagacag 240
agtctccctc tgtggcccag gctggagtgc agaggcatga tcttggctca ctgcaacctc 300
tgccccctgg gttcaaacaa ttcttgtgtc tcaacctcct gaaaagctgg gaataacggc 360
gggcacccac cacg 374

<210> 343
<211> 373
<212> DNA
<213> Homo sapiens

<400> 343
cgttgctgtc ggaattgaag cccaggtggg tgtccaatgc cagaccatgg atcatcagcc 60
tgggacacca aagtgccaca ctctcagagt gaggatgatc ctcaggaagt cagctctacc 120
accctccaca ccaggaagtg caagcagact cacctcatga ttgagcagaa taagagaatc 180
cttgagaagt cataagtttg catggatttg cagcacaagt tcaaacaact agatggcacc 240
aaatccctca atttatgaag acatttaacg tggtacccaa ttggaaacgc ctcatggcag 300
aaacaaacat aaatcctttc tagaaggttg ccttgtccaa gtgtttccca aaccagtttt 360
tttagggaaa atg 373

<210> 344
<211> 350
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(350)
<223> n = A,T,C or G

<400> 344
aagctcctgt ccccgaacaa gaagcagagg aaaaaccaca ctagcaagct gcaagagttg 60
gcactgctgc tgcccatagc cctgaagacg gggaccaaga agctcacaaa ggtacaggga 120
ctagaggaga ggggccagat ttgggacgca ggtctttaaa tagcagcaaa tgggtcaccc 180
tctcctggga aacctggaca gatcctttca gtggcagcat tcaaatggga atggtgctac 240
tctgaacggg aatttccggg agtctgtgat cccataacta ggtgcctgga ggatcctttt 300
tttgcaaagg agagaggaga aaccgggcng gggaaataga gatagcacan 350

<210> 345
<211> 361
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(361)
<223> n = A,T,C or G

<400> 345
cgtgtctgag ctgtgatgac gctggccttg tgtttcgtca ggtggtgtcc acaggtgccc 60
tgctggttgc tttttctctg ccctgggaga ggctcgctga ggctgcacgg ctgcctggga 120
gaggctcgct gaggctgcac ggctgcctgg gcggcctctg acgcgccctg tggactgcag 180
catccagggg atcgcgtctg caactcttat tgctttggcg tttacctatt ggggatttaa 240
aaaaaaaatt gttcattttt ataaaaaaga catgggctgg ctgggcacgg nggctcacgc 300
ctggaatccc aatactttgg gaggctgagg tgggcggatc acctgaggta aggatttcaa 360
g 361

<210> 346
<211> 223
<212> DNA
<213> Homo sapiens

<400> 346
ggaggtggag gttgcagtga gctgagatca tgccactgca ctccagcatg ggtgacagag 60
actccggctc ataataaaaa aaaaaaaaaa aataattttt tgactgaaaa aatatttttt 120
tgtgtggggg aggggttttt ttttgggcgc aagaagtaac aacctgtgtt gggggggggt 180
tgcccacccc cttcttttttg gagagcttgt gttcttttt ttt 223

<210> 347
<211> 477
<212> DNA
<213> Homo sapiens

<400> 347
ttgttctttt tgcaagatcc cactcgattc aattcggcac gagatattaa aaggaggtta 60
gtgcttaaca agaatttaat tgctctgcaa ttcatgctgt ttctaaacaa acctaaactt 120
taagatcttt ctaggggcag aaagcccatg agaaatacaa tggaaggtaa agacaatggg 180
acggcggaag tggttgcacc ccgtgcaacc agctgcagaa tgaataggga aaacagcaaa 240
gctgtactag cctctggttt atcaactcca gaccatgaga aagataactg tagatacagt 300
tacactatga caaggctaag cacgaatcac caacatgttt cccaaagtgg gtggtggccc 360
tgaaagtgtg tttgcttgtt agatggaatc aagagctaaa atcaaaggct actcctgaac 420
cgttttagta agacccgagg taggagttca aaagcctcag tctcagttcc cccgtat 477

<210> 348

<211> 321
<212> DNA
<213> Homo sapiens

<400> 348
ggagtagaat gcttttcact agctctcaaa ccttggtgtg aggaattcct tggagggctt 60
gttttaagca cagattgctg ggcctactgg aatcagtggt tctgcaagga ggccctaaat 120
tcgcctccct gacaggttcc tggcagatgt gatgctgcct gaggcctgca cttaggacca 180
ctgacatagc caactagaag aaacatggga aggctgggga gtctctccct gtagtgagcc 240
ctcaggagga ggattagaat gggggcactg gaggaccagg cgcggtggct cacgcctata 300
atcccagcac tttgggaggc g 321

<210> 349
<211> 434
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(434)
<223> n = A,T,C or G

<400> 349
cacagcactt gtcttttggc ggatnnnntn gagtcgaatt cggcacgaga tgccgtggtg 60
gagaacacac ctgtggctat cttatgtgag gactagaggt gaagaggaga tggacactgc 120
ctctggagcc agcctgacac caaggacagc acttgtcatc atccctatcc tcgtcagccc 180
caccctgctg cctcagctgg acccagggct ttgacacaaa cccagtgctt tgcttatggg 240
tgctcgctgg ggtccggtgg agactgacca ccctgcttga gccaaagaca aggtgatgag 300
agatggggag aggccattgg ctcccagacg gaacagtgct ggctgtggct agagaacagc 360
aggtctgtgc agtgtctgag ggcaggttcg gaagggtagc anagagagag agaccgaaag 420
agagagagag agac 434

<210> 350
<211> 178
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(178)
<223> n = A,T,C or G

<400> 350
acgtttagcc ctgaacagga gccaccatgc attgcttcag cttcattaag accatgatga 60
tcctcttcaa tttgctcatc tttctgtgtg gngcagccct gttggcagtg ggcatctggg 120
tgtcaatcga tggggcatcc tttctgaaga tcttcgggcc actgtcgtcc agtgccat 178

<210> 351
<211> 442
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(442)
<223> n = A,T,C or G

<400> 351
tagctttttt gatgatccca tcgattcgcc gatttaaggc tgcaaggaag gagtcctgtt 60
attttgtttt ttcctgagca aagccgtttt cttcagagct gcggcagaaa cggttgaaga 120
cgctggactg cgggcagggg gcagtgcgag ccgtacgatt taatgtggat ggcaattact 180
gcctgacgtg cggcagtgac aagacgctga atctgtggaa cccgcttcgg gggacgctgc 240
tgcggacgta cagcggccac ggctacgagg tgctggatgc ggccggctcc tttgacaaca 300
gtagtctctg ctccggcggc ggggacaagg cggnggttct gtgggatgtg gcatcagggc 360
aggtcgtgcg caaattccgg ggccacgcag ggaaggtgaa cacggtgcag tttaatgaag 420
aggccacagg tattctgtcc cg 442

<210> 352
<211> 413
<212> DNA
<213> Homo sapiens

<400> 352
cgttgctgtc ggtccctttc catcctcttc tccctgcttc cctcccagcc tctggcaacc 60
actattgtct tttatacttc catgagatca gcttttaaat tccataaatg agtgagataa 120
tgtgatactt gtctttctgt gtatagctta tttcacttca cataagtcct tcaagttcat 180
ccatgttgga ctaaataaca gaatttcttt ttttttttaa ggacaaaaaa tatccgaaac 240
aaagccaacc aatccatgac ccaaaagttgg tgctattata tttccattga gaggggatta 300
tctcaaagtc taggttaagt ccttgttcca aattaaaatc tgaaattgga aggggtggat 360
aacaactaga aatatagtgg aaaagaagct cctaatatgg actccattca tgg 413

<210> 353
<211> 167
<212> DNA
<213> Homo sapiens

<400> 353
aaagcacatt tcacttatat gtccagtatc cccaatatct atgactttaa aagtcctgca 60
gaacaaaggc tattaccgag tgctcagtgc ctgttcttga gatgcttcac attgtggcag 120
tctcagaaat aaacgttttt taactgagag cttttgttta ccatgag 167

<210> 354
<211> 238
<212> DNA
<213> Homo sapiens

<400> 354
gatcatacaa tctagtagcc tgttagaata tggagtatga cagacagatt ctggaagtca 60
cattattagt atcaaccttt agtgtttgtt tttatagaca ctgacctaca tataaataag 120
attgtgaaat ttgaaagaag tacaaaaaca taacccataa tcaaaagaga ataagatcaa 180
tagaagaata ttttgaaata atcaaaccaa acatttaaaa taactatgca aaatatta 238

<210> 355
<211> 374
<212> DNA
<213> Homo sapiens

<400> 355
tgtcgcgcaa gctggagtgc agtggcatga tctcagctca ctgcaacctc cacttcccag 60
gttcaagcca ttctcctgcc tcggcctccc aagtagctgg aattacaggc atcctgccac 120
cacatctggc taatttttgt atttttaata gagatggggc gtcaacatct agaccaaggg 180
tgctcttgat catcggaaat actgtgagcc gtcgacaatg tgctcccagt gtgatgctat 240
tattttataa atccaaggct aagtataata attaggctta gaacacaata acacctctgg 300
ccaaagtatc gtaacccccc actttactaa taatctcctc agtttacaga tgagccggtc 360

ctaatatccg gttc 374

<210> 356
<211> 131
<212> DNA
<213> Homo sapiens

<400> 356
ttcggctgtg aaatgacaac agatggtgtc gggtgcgata tgacgaccga atggttaccg 60
ctgctataac acgaccctaa gtggatcggg ttgcgggaaa ttcgactgca caggggggctg 120
gcgtttgact g 131

<210> 357
<211> 226
<212> DNA
<213> Homo sapiens

<400> 357
aaatacattt tattttgtta acatttaaga aatctagttg cttcatgttg ataatcaaat 60
aaataaacct accaattagg gctttaacat ttgttatgga acatggtaca cattcccatt 120
gaggtttaat tgttaaggtt tgtttgacac attttaagtg tttagactga aatcttcacg 180
gtttggaaat cattgtactt ctagcactgg cagaagacat gtaaat 226

<210> 358
<211> 414
<212> DNA
<213> Homo sapiens

<400> 358
cgttgctgtc gaatcagcta agggattgta atttttaatt cttttgaaaa ataaatattg 60
tatttaaaag acgttatttc acagaagcta acaaagagac cttagataac atttgtttgg 120
ttagccacac ggttgagcac aaaacaatgt gtagatgtgt tgaagattag ggcaggaggc 180
tcaacttctc ggtgaccttt ttttgcttca caacaagcca attatagttg aatcattttc 240
tctcttagct agttgttact acaaacttta taagaaaaac aactagacac cttctagttt 300
taattaatac caactccttt agagttagag actttttaaa aagaatcatt aagcatattt 360
tctttttttt tttttaaaaa ttaacactct ttaggccttc tatttttccg tgtt 414

<210> 359
<211> 406
<212> DNA
<213> Homo sapiens

<400> 359
cgttgctgtc gaatcagcta agggattgta atttttaatt cttttgaaaa ataaatattg 60
tatttaaaag acgttatttc acagaagcta acaaagagac cttagataac atttgtttgg 120
ttagccacac ggttgagcac aaaacaatgt gtagatgtgt tgaagattag ggcaggaggc 180
tcaacttctc ggtgaccttt ttttgcttca caacaagcca attatagttg aatcattttc 240
tctcttagct agttgttact acaaacttta taagaaaaac aactagacac cttctagttt 300
taattaatac caactccttt agagttagag actttttaaa aagaatcatt aagcatattt 360
tctttttttt tttttaaaaa ttaacactct ttaggccttc aatttt 406

<210> 360
<211> 400
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 360
cgttgctgtc gctgaaatac catcagaggc ccaggagggg ctagttgtaa ctggcaaata 60
tagtaaatta atttgctctg gttgataggt agcaagcagg gtttatatac attgtcacct 120
acttttccag ttaacaggag agactggaga ttttatgaaa tttgatattt aaatgttggt 180
aactgggttg ggcaccatgg ctcacacctc taatcccagc acttcgggag gctgaggcgg 240
gtggagcacc tgaggtcagg agttaaagac catcctgacc agcctggtga aacacagtct 300
ctaataaaga tacaaaaatt aggccgggtg tggtggctca tgcctgtaat cccagcactt 360
tggggaggcc aaggtgggcg gatcacctga gtcaggagtn 400

<210> 361
<211> 409
<212> DNA
<213> Homo sapiens

<400> 361
cgttgctgtc gcaaggatct ccattctccc tgtctggata cttctttggc agagatatgt 60
cctttaggaa aaaatctcag ctctaaagtt aattcagaca gcggtattcc aggactagca 120
gccagtgcct tacttgtgag tcacggtgct tacatcagaa gcctgtttga ctattttctg 180
actgaccttа tgtgtgcctt accagccact ctgagcatat atgaacgtat gtcagttact 240
cccaatacag ggatgagtct ctctatcata cactttcgtg acggaatgag aagttaaacc 300
aacggttcag tgtattcgta tgaacctaca ggatcatcga aatggactga ctgatactcg 360
ctgcggataa atctgcatca ctatctaacc attttgagcc tctgaaggg 409

<210> 362
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(386)
<223> n = A,T,C or G

<400> 362
atttcagatg gatagtagtt caggtacatt actggtacag tgtgctcaaa cgttttcccc 60
atgattacta ggttcttgtg atatctggtc tagaaacaca gccatcattt ataaatctgt 120
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtttct tttaatggga gaatgtgatc 180
agagttctaa aaaactgaaa taaaagtgcg tttttagaat atgacttatt ttgtaaattt 240
tagatagatt atagagtgac tactataccc tttttcagag cagaggaaga gaacccattt 300
aggcatccgt ttaaaggaga tttggtgtca tgttcttagg gtcttttatc tgaaagatga 360
actgcggctc tgtctattat agatan 386

<210> 363
<211> 406
<212> DNA
<213> Homo sapiens

<400> 363
cgttgctgtc gcagggtttt gctttgtctc ccaggctgga gtgcagtgat acaatcatag 60
ctaactgcaa cctccgcctc ctgggctcaa gcaatcctcc cacctcagcc tccccagtag 120
ctgggatcac aggcatgtgt gaacatgcct ggctaagttt tcatattttt ttgtagagaa 180
ggggtttcgt catgttgccc aggctggact cgaactcctg ggctgaagag acctgcctac 240
ctctgcctcc caaagtgctg ggattacagg catgagccac ccagagccaa ggtctcagtc 300

ttttagtgag cttgtttatg gattttgaac tatatcctgt ttctcagcgc ctcaccccca 360
ggatggcttg aatgacctgt agttgggtat ttcccttacc tcatgt 406

<210> 364
<211> 376
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(376)
<223> n = A,T,C or G

<400> 364
gtgctgcatg tttaaagtat tccctctgtt ttacttcatg atagttggcc cctttcaggt 60
tataacacgg acatttttct atggttttca ttatttgcac atgccaacag agtagaatag 120
atttttaacg agcatcactt cattgcaagc aaatttatta atccagtggt actgatgaaa 180
ctaaggagct ctttggggtc aggctcgatg gctcacgcct gtaattcttg cactttggga 240
ggctgaggcg ggtggatcac aaggtcagga gttcaagacc agcctggcca agatggtgaa 300
accctgtctt tactaaaaat acaaaaaaat tagccgggca tggtggcggg tgcctgtaat 360
ctcagctact cgggan 376

<210> 365
<211> 140
<212> DNA
<213> Homo sapiens

<400> 365
tactgctgcg agatgacgac acatgggtac ggttggtaga ttacgactga atggtactgt 60
tgcgtatctt acaccttaat ggctcgtgct gtggtgaata ctactctaca gggaacctgt 120
tggcgtatat tcctcagatg 140

<210> 366
<211> 137
<212> DNA
<213> Homo sapiens

<400> 366
tgggtacggt tgctataaga cgacaaattg gttcggttgt gtttagatga cagatgggtt 60
cgtgttggct attaatctca ccaatgtttt cttgttgttt tatactgacg taatgatcat 120
tttttcggtt atctgcg 137

<210> 367
<211> 398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(398)
<223> n = A,T,C or G

<400> 367
cgttgctgtc ggggagatcg gaagattttt tctctatctg gactctgctg gtgtgcctgt 60
tgactggcac tgggggaaag tcgtctgaaa ctggggcctc agtttcttaa ggaggttggt 120
ttgaatcaca atcttcaaat atagggggat ctgagggtac aaaaagggtc tgtgcacctc 180
ctgaaatagt atataccatt gtgtgtgtga gcaaaaatgt attccaaccc ttcccacgcc 240

cgctcgaggt ccacagtttc catcagatta tcagtaaata ggataccaaa tgtagtgaaa 300
agttaccatt acatgccagg cgcggtggct cacgcctata atcccagcac tttgggatac 360
tgagggcggc agatcacttg aggtcaggag atcaaaan 398

<210> 368
<211> 209
<212> DNA
<213> Homo sapiens

<400> 368
aaatacattt tattttgtta acatttaaga aatctagttg cttcatgttg ataatcagat 60
aaataaacct accaattagg gctttaacat ttgttatgga acatggtaca cattcccatt 120
gaggtttaat tgttaaggtt tgtttgacac attttaagtg gttagactga aatcttcacg 180
gtttggaaat cattgtactt ctagcactg 209

<210> 369
<211> 405
<212> DNA
<213> Homo sapiens

<400> 369
tgactatgtt ttatctacac taaaaccctt gcagttccca atctgctcgt tgtagtttaa 60
aactttcacg cttcgttaat gtcactgcct ctgtcatctt tgaaaagacg atagttttgt 120
gcctgctgaa catatatgaa atgcatgcaa aaagagtttg ttgaaactct ttgttacgac 180
ttgctcttcc cgcttcacat tctacctggc ctctaattta atattaattg gtttggaaat 240
cagagtcaac aaaaagaccc acaagactta atggggtccc atcagtcatc ataatttgat 300
ttgaaaggct gaaagcgggc agcactgtca ttcatagcca aacagtccta ttgagaggtc 360
ttggactatc atgccagctg tcagaccact ccatgcactg ggtgg 405

<210> 370
<211> 398
<212> DNA
<213> Homo sapiens

<400> 370
cgttgctgtc ggttcaggtc actgaaagca aggaaagcct gataaactgc cacggccacg 60
aggagtctaa ggacacatcc aatttccatt cgcatccaaa atggaatccg agacagaaag 120
aggaccttag ccttcatatc tgtttttttc ttatgaagct tcttctggtt ggaaacttgt 180
caaatttcat caggtaagaa gtgctaaagt gaacctgtaa actttgtttc aaaaaacaaa 240
aaccgaagtt taagaaatct aaagatggtg tcagccttag acagatctct ggactgtaat 300
ctgggaaagg tcaaataaga tctccaatcg tgtacaattc caaatacatt tgagagcagt 360
gggtctgaaa atgtggttcc cagaccagca gcatcaat 398

<210> 371
<211> 325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(325)
<223> n = A,T,C or G

<400> 371
gagtgtgact cttaaaggca agagcatgta tattatgcca aagcagcctg aaatatttta 60
ttcacagaca gacagacaat gcttgactcc ctgctaatct gaaatacttc gtggggaggg 120
ccagggaaat cacaacaaaa tttcagaagt agaatgagct atttggtgta tgtctcccag 180

gccaataaat aacacgaagg aagaataaat ttctttgcta accacacgaa ggagaaatac 240
actttttgc tctaaaatat tttccaatta tctccacgac actggaggga aggactatca 300
ncnngtacat naatgtgagg aaggg 325

<210> 372
<211> 405
<212> DNA
<213> Homo sapiens

<400> 372
cgttgctgtc gcatggagtc ttgttttgat gatgacagtt ttctgtaact acagcttgga 60
aactatgcaa atggtctaga ttcctcatag ctcacatgat aggatatagg tagtgatgac 120
attttgctct tcttgtggga acacacactt caaggaggag atagtgactt tgagatagga 180
acagtttaag atgcagtgtg agtctggcct gcgtgcggtg aggaggcccc gccaagagac 240
tggtggacat ctgactgtgg gatgtgctct caagtaggac gtcatcagga cagattctga 300
ataggcatca tgagagtgct ggtcagaaac ggctgccact ttttttaatt taattttatt 360
ttttatttaa aggaaggaaa catagctagg taagattttt atcac 405

<210> 373
<211> 403
<212> DNA
<213> Homo sapiens

<400> 373
catcgattcg aattccgttg ctgtcgctta gtcttcatac tgttttaaat gcttatttac 60
ttatccttat tccccattta ggctctaagc actaagtggg tactgcaagt gctcaaaaat 120
tttggttgct agaaatagta gtgttaagtc aatgagaaat ggtcttaaaa tatagaccca 180
gggcagatct tttcccacct cagtacaatg agctgtcatg tgccttactt gactgggaat 240
ctatcacaaa tacatgtgca gacatttcta gtttagataa cattaaaaaa acatttagcg 300
aacagtatgt attctgctcc ctccttatac atcttgcagt acattaagga tttccagttt 360
tcctttcccc caaacagttg cagaaagtca gtataagagt gtt 403

<210> 374
<211> 371
<212> DNA
<213> Homo sapiens

<400> 374
gagatttgtt acgtatttta gacatcttct aagtaactcc acagaagact ctcaaaacaa 60
aagcgtgacc tcaacctgcc tataggtgcc ctagtggaga atgcttgata ccaggtgaca 120
accccacgc gccccaatag tgcaagaaca aagtggaggc cagagaaggg gctggtagtt 180
tcttcttagt tctcagaagg cttatctgat gatccactca cctctccttc caccttaagg 240
gaagaatgga agataataag caaaacttct agaaagagca attagccctt caacttctaa 300
tatccaggtg ggtcagttcc cagtgagaga ggtaagtggg caatggtaag ctgtgccaca 360
caccaagtat g 371

<210> 375
<211> 420
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(420)
<223> n = A,T,C or G

<400> 375

tgagtgtggg gccctgcgtg acagccctgc ccctgagtat ctaatgtgtg cgttgacagc 60
cctgcccctg agtatctaat gtgtgcgtga cagccctgcc cctgagtatc taatgtgact 120
ggctgttgtc tcccgggata tcttccaaga gacagaataa cctggatctg aggataaatg 180
ccaggaggaa gggagaatgt atccatggtt cccatctcca ttagtcaaag gtacctctac 240
agtgccttca cagcccaggc ctgactgcgc ctagcggctc ctcagcgttt caggctcagc 300
agcagcaggg acaccacaag tggccaggta cagcctggaa cccctcccag ggctggccct 360
agaggcaggt aaagtgagga gcaccttaca tggtgcataa naagtgtcca atgccagtgc 420

<210> 376
<211> 417
<212> DNA
<213> Homo sapiens

<400> 376
ggcacgggag gtttcagcga gctgagatca caccactgca ctccagcctt ggtgacagag 60
tgagactctg tctcaaaaaa aaaaaaaaaa aaaaagcccc ccccctttat tattataagg 120
gggccttttg ggataagccc aaacccaaaa aaaatccggg gggggggcca ccccccccct 180
gggaattttt taaaaaaaaa tgtttttttc ggacccttgg gggggggccc cctttttgg 240
tcaccgttaa taggggggaa aaaaggtgtt aattacaaaa agggactttt ttttttttg 300
gggccttggg ggaggggggg gggagtttat tcatgtcccc tttttcttcc cagaagagga 360
atatttcccc cgctcagaaa gggaatcctg cgccctttta tgccctgggg ggttttg 417

<210> 377
<211> 375
<212> DNA
<213> Homo sapiens

<400> 377
gatttgtggt gagattctct cccaggccac aagacatttc ctgctcggaa ccttgtttac 60
taattgtaag tactttacaa gtaagaactt gttttaaaaa cttagcattc aaaaaaaaaa 120
agctttttt aaaagaaatt ggattttctt gttttttttct tagcaggtta tattttgagt 180
ttcagctaaa agactaaggt tttcttatct aatggcttta aatttataca tttaggcaaa 240
ttcaacaatt ttttgctaag cattttgcca aatgccaggc ttttcaaaga agggtaagat 300
cccacccttg aatcctcatc aattgctgct ttttgcagaa aacacatatt atacattgta 360
tttagaaaca tgaag 375

<210> 378
<211> 164
<212> DNA
<213> Homo sapiens

<400> 378
agtaaaaaca aaatcaagac taagagagga ggaattagaa tgagactcat gtaccctcct 60
tccccactcc aggggaagga gagactgttt gggaatgccc tcccactact tccagggcag 120
aggctgtgca gaagagcctt ggagaatctg cagcccactg atgg 164

<210> 379
<211> 239
<212> DNA
<213> Homo sapiens

<400> 379
atgccctctc cccatgaaga atcactctga attcttcacc actgatgctt tccatccgga 60
ggtgaaacgg cccagacacc ctgtcccctc ccctctctca ctcctcttac aggcacagtg 120
cggccctcgc atgaactccc cgtcgacccc tgcccccctgc ctgatctcta tcccacgctc 180
ctctctgcgt cttctgccta cctaccgccc ttccttctca atccgccgcg cgcttcccc 239

<210> 380
<211> 406
<212> DNA
<213> Homo sapiens

<400> 380
gaaggaatgt gggcaaggtt ttgaacttca ttgttcttga agctatcaga ccacatcgag 60
gctcagcagt catccgtggg catttggttt caacaaagaa acctaacatc ctactctgga 120
aactgatctc ggagttaagg cgaattgttc aagaacacaa actacatcgc actcgtcagt 180
tgtcagttct ggggcatgac tttagcgttt tgtttctgcg agaacataac gatcactcat 240
ttttatgtcc cacgtgtgtg tgtccgcatc tttctggtca acattgtttt aactagtcac 300
tcattagcgt tttcaatagg gctcttaagt ccagtagatt acgggtagtc agttgacgaa 360
gatctggttt acaagaacta attaaatgtt tcattgcatt tttgag 406

<210> 381
<211> 406
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(406)
<223> n = A,T,C or G

<400> 381
cgttgctgtc gcttgggcaa aagttcagtt aatagtgctg ttctgaaaga tagggttaat 60
aaacaatttg ttggagaaac acaaagcacg actttcccag taaaatcaca gcaactctct 120
agaggagcag atcttgcaag accaggagta aaaccctcaa ggacggttcc ctctcacttt 180
attcggaccc ttagtaaagt tcagtcatca aagaaaccag tagtcaagaa catcaaagat 240
ataaaggtta ataggagtca atatgaaaca ccagatgaaa ctaagatacg gtcatacact 300
gttactgaac agagagtgaa gcacaccana cccagaacat accccagttt gcttcagggt 360
gaatataaca acagacatcc aaacatcaag caagatcaga agtccn 406

<210> 382
<211> 186
<212> DNA
<213> Homo sapiens

<400> 382
caacgcgtct ctgttctggc tacatagggg ggcgcttttt ttttttttcc ccacatggtt 60
tactgctctt tttgtgtagt tggttaaaac ccctgttctt tgttgggtct ggataaggac 120
gccctctctg tttggatgct tgtggcgctc tacggcgggt ttgttttggc gagccctttt 180
atatgg 186

<210> 383
<211> 411
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(411)
<223> n = A,T,C or G

<400> 383
cgttgctgtc ggaattgaag cccaggtggg tgtccaatgc cagaccatgg atcatcagcc 60
tgggacacca aagtgccaca ctctcagagt gaggatgatc ctcaggaagt cagctctacc 120

accctccaca ccaggaagtg caagcagact cacctcatga ttgagcagaa taagagaatc 180
cttgagaagt cataagtttg catggatttg cagcacaagt tcaaacaact agatggcacc 240
aaatccctca atttatgaag acatttaacg tggtacccaa ttggaaacgc ctcatggcag 300
aaacaaacat aaatcctttc tagaaggttg ccttgtccaa gtgtttccca aaccagtttt 360
tttagggaaa atgcacagct tactataaaa aaattttaac ctaaacttgg n 411

<210> 384
<211> 354
<212> DNA
<213> Homo sapiens

<400> 384
ctgggaatac aactgttcca gcaaaagggc ccctgtcttg ggaaggccca cgctgaggag 60
gggaggatgg cccgacctta ggggacatag tcagagacta tgctttcaag cctccatggc 120
ctcccttgca cggcagagaa gagggtatag aaagtatgga cagggagccc agtggagacg 180
gagctggcca gccaggaagg acctatgtat tctgggcagg aaggtgagaa gggctcccta 240
ctccaggcct gcccaggccg tctcctgctc caagctccgc tagctgcccc gggctacgct 300
agctgccctg ttgcccgcac caccacgttc cctggcgcct gcgggaggga aacg 354

<210> 385
<211> 381
<212> DNA
<213> Homo sapiens

<400> 385
tgcctcagcc tctcgagtag ttgagactac aggtgcccat caccatgcgt ggctaatttt 60
tgtattttta atagagacgg ggttttacca tactggccag gttggtcttg aactcctgac 120
cttgtggcct gcctgcctcg gcctcccaaa gtgttgggat tacaggcgtg agccaccatg 180
cctggactaa gagtgtgtgt gtgagtatga ctttctcaat tcgcgtctcc cctccccttc 240
cttattgcgt catcagggta gtctttccgt aagacacgtc gcaatcaagg cggtcgagtc 300
ctagacatcc tttcttcctt agggcgtcca gctcattgca ttaacacgac tatctgtttt 360
ttatctacgg tgcgtagacc g 381

<210> 386
<211> 398
<212> DNA
<213> Homo sapiens

<400> 386
ggcacgagac aaaatgggtt caccaggctt gtttacaacg ctgggtggat gaaaagcaaa 60
gaggaaacag tacagccaga gtggcatgtc ctcagtgcaa tgctgaatac ctaatagttt 120
ttccaaaatt gggtccagtg gtttacgtct tggatcttgc agatagactg atctcaaaag 180
cctgtccatt tgctgcagca ggaataatgg tcggctctat ctattggaca gctgtgactt 240
atggagcagt gacagtgatg caggttgtag gtcataaaga aggtctggat gttatggaga 300
gagctgatcc tttattcctt ttaattggac ttcctactat tcctgtcatg ctgatattag 360
gcaagatgat tccctgggag gacttatgtg cttagact 398

<210> 387
<211> 383
<212> DNA
<213> Homo sapiens

<400> 387
gatttgtggt gagattctct cccaggccac aagacatttc ctgctcggaa ccttgtttac 60
taattgtaag tactttacaa gtaagaactt gttttaaaaa cttagcattc aaaaaaaaaa 120
agctttttt aaaagtaatt ggatttttctg gttttttttct taccaggtta tattttgagt 180
ttcagctaaa aaactaaggt tttcttatct aatggcttta aatttataca ttaagccaaa 240

ttcaccattt tcttgttaag cattttgcca aatgccaggc ttttcaaagt agggaaagat 300
cccagccttg aatcctcatc aattgctgct ttttgcagca aacacatatt atacattgta 360
tttaggaaca gggatcatta atg 383

<210> 388
<211> 405
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(405)
<223> n = A,T,C or G

<400> 388
cgttgctgtc ggttttatct acactataac ccttgcagtt cccaatctgg tcgatgaagt 60
gtaaaacttt cacgcttcga tgatgtcact gcctctgaca tctttgaaaa gacgatagtt 120
gtgtgcctgc tgaacatata tgaaatgcat gcaaaaagag tttgttgaaa ctctttgtta 180
caacttgctc tttccgcttc acattctacc tggcctctaa tttaatatta attgttttgg 240
aaatcagaga caccaaaaag acccacaaga cttaatgggg tcccatcagt catcataatt 300
tgatttgaaa ggctgaaagc gggcaccact gtcattcata tccaaacagt actattgaca 360
ggaaatggac tattaggacc agctggcaaa ccactccctg cactn 405

<210> 389
<211> 405
<212> DNA
<213> Homo sapiens

<400> 389
cgttgctgtc ggaggaagga agcctgcaga cagacgcctt ctccatccca aggcgcgggc 60
aggtgccggg acgctgggcc tggcggtgtt ttcgtcgtgc tcagcggtgg gaggaggcgg 120
aagaaaccag agcctgggag attaacagga aacttccaag atggaaactt tgtctttccc 180
cagatataat gtagctgaga ttgtgattca tattcgcaat aagatcttaa caggagctga 240
tggtaaaaac ctcaccaaga atgatcttta tccaaatcca aagcctgaag tcttgcacat 300
gatctacatg agagccttac aaatagtata tggaattcga ctggaacatt tttacatgat 360
gccagtgaac tctgaagtca tgtatccaca tttaatggaa ggctt 405

<210> 390
<211> 402
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(402)
<223> n = A,T,C or G

<400> 390
cgttgctgtc gtcaggacac cgggagtgga aggcaaccgg tacgcgctgg gtctcagccg 60
ctgcaaaaac ccggcatcgc agggcaagag ttgttccagc gtcctccgct gactccaaac 120
cagcgggtct tgaccaaggg attccaagag agaggattag gcccggctaa gcacctggga 180
gcagctgtgg aaaaaggaga gacaatcatc aggcacgatg ccaaaaatga actgtgacct 240
gaaaaagaga agaaaggaaa attgtgcacg atgctacgtt ttgtttttta aaagtggggg 300
ttgaggcaat aaaatacgga atatttgatt aacgtaatcc agaattgtaa agttgattgc 360
tcgggaggaa gaaaggactg ggacacagcc gatgggccta cn 402

<210> 391

<211> 417
<212> DNA
<213> Homo sapiens

<400> 391
cgttgctgtc gggaggctga agtgggagga tcctttgaac ccaagagttt gaggctgcag 60
caagccatga tcacaccact gcactccagc ctgggtgaca gagtaagacc ctgtctcaaa 120
ctttttttaa aatgaaagaa tccaaccttt ttttactctg acctgcgaga gtgcagaggg 180
tctggggaac atttgcagaa gcaacaggta ccagccagtg ctggaaggag ctcaccctgg 240
gaggtctcgt cagcctctgt ccttcatggc tgtcccttgt gtcccatgtg gagagccctt 300
cctccctttc cacatggtaa gcactgagcc caatttcttc tcaccccaca gatggtccct 360
cagagcagag atgtctaatg aaaggttcag attcagatca ctaactttcc atcttcc 417

<210> 392
<211> 405
<212> DNA
<213> Homo sapiens

<400> 392
cggcacgagg agacaggact acgcgcctgg agtaggagaa ggaggaaaaa agagaccata 60
gacttgcatc ctggcctaga gcggcccttа aagtgccagg gagaggaggg cgggtgggga 120
ccactccaga attggccgct ggcggtatca tggcgacccg gaacccccct ccccaagact 180
atgaaagtga tgacgactct tatgaagtgt tggatttaac tgagtatgca agaagacacc 240
agtggtggaa tcgagtgttt ggccacagtt cgggacctat ggtagaaaaa tactcagtag 300
ctacccagat tgtaatgggt ggcgttactg gctggtgtgc aggatttctg ttccagaaag 360
ttggaaaact tgcagcaact gcagtaggtg gtggctttct tcttc 405

<210> 393
<211> 421
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(421)
<223> n = A,T,C or G

<400> 393
atcgattcga attccgttgc tgtcgcagca ccattatttg ggtctttcag ggtggccatc 60
tctgttagaa gacagtagca tgttaacatc actgcattga gtttttgtct ggtgtaaaga 120
atgactttta atgtaaacaa actgcaggct tttttcaaac taattttaag aatttagtct 180
tatttcgttg taaactgcgg atctaattat attacattac tctgttcaga tgggatggat 240
actaccactt gtccatgatt ttcatttgaa aagcaaggat ctatatcatt tccccccaga 300
cagcattatt taacactccc cttaactgtg tttgaacttt ctcttttaac acaaatgtca 360
cgtctttaca gttgtaatat caccatgttt cccattgctg ataatactta tatgaacccc 420
n 421

<210> 394
<211> 418
<212> DNA
<213> Homo sapiens

<400> 394
ggcacgagcc aacctgggca gctgcaatga ctctaaactg gagttcagga gtttctggga 60
gctgattgga gaagcggcca agagtgtgaa gctggagagg cctgtccggg ggcactgaga 120
actccctctg gaattcttgg ggggtgttgg ggagagactg tgggcctgga aataaaactt 180
gtctcctcta ccaccaccct gtaccctagc ctgcacctgt ccacatctct gcaaagttca 240

gcttccttcc ccaggtctct gtgcactctg tcttggatgc tctggggagc tcatgggtgg 300
aggagtctcc accagaggga ggctcagggg actggttggg ccagggatga atatttgagg 360
gataaaaatt gtgtaagagc caaagaattg gtagtagggg gagaacagag aggagctg 418

<210> 395
<211> 404
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(404)
<223> n = A,T,C or G

<400> 395
tcgaattccg ttgctgtcgg gggtttcatc atgttgttca tgctggtctt gaactcctga 60
cctcaggtga tccatcttcc tcagcctccc aaagtgctgg gattacaggc gtgagccgcc 120
acgtccggct aacaagtact ttttttattt tatttttattt tttggatgga gtctcactct 180
gtcgcccact gcactctagt ctgggtgaca gagcaagact ccatctcaaa aaaaaaaaaa 240
aaaaaatttt ggtaacctta ggggtttaaa aacaacaaaa ttcatttcca ttttggaggg 300
tggaaccccc aaaataaagc ccccagaaaa gccacctctt ttttgagagg ggaggggccc 360
catggaaggg ttggcccctg cccttgagcc cggtgaaccc cccn 404

<210> 396
<211> 403
<212> DNA
<213> Homo sapiens

<400> 396
tcgaattccg ttgctgtcgg gaggatactt tcctgtcccc tggctttggg tttgcccacg 60
tggcttgctc tggccttgga atgaagcaga aacgaaaggc tgccagttcc gagcccacgt 120
ctgaagtcgc cttaggtggt tccgcgggcc ccgtgcgctc ccaccttcac ccagagggcc 180
ttctctggtg cagccgctgc ttcttcagcc tccgcccaaa aggaacggag ccccctggcc 240
gatccgcagg cctacaggga gccacagagc gcagcggctg gaccagcgtt caagcccaag 300
cacaggcctg cgagaacctt gttccagccg ccgtttatga tggttgatta tgacgcgttg 360
cagtggcggt agctcaccaa tccagtgcgt gcacccgctc ctt 403

<210> 397
<211> 410
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(410)
<223> n = A,T,C or G

<400> 397
cgttgctgtc gcactttagg gattgttaca gtcactgttc aatgtgcctt cccatagagt 60
tctttcattc ctttgctcaa caagaaaact tggcaaagcc tttaaatata gaggcccttt 120
ttttttttt ttttccccaa aaaaaattct aatggggtgc cccggctggg aggggagggc 180
cgaatcttga gctagttgct ccccccgacc ccgaaatgaa gggaattgcc cggcttagca 240
ttcccaagtg acgggagaaa gcgggtgtac cccccaccac gctggaatga tcgagtcgca 300
tggactgagc ggtcagacgc gggaagtaag aggcaaccgg agcacccatt tggattacgt 360
aggtgctagt ttttggccag gaaccggaga gaatgcggcc tgcattgacn 410

<210> 398

<211> 420
<212> DNA
<213> Homo sapiens

<400> 398
ggcacgagaa tccttaaggg cgagttggca tggatcatct acaaaaattc tgtaagcata 60
attaaaggtg cagaatttca cgtgtcactg ctttcgattg cacagctatt tgactttgcc 120
aaagatctac aaaaagagat ttatgatgac cttcaggctc tacacacaga tgatcctctc 180
acttgggatt atgtggcaag gcgagaatta gagattgagt cacagacaga agagcagcct 240
acaacgaaac aagccaaagc agtggaggtc ggccggaagg aggagaggtg ctgtgctgtg 300
tatgaagagg cagtgaagac tctgccaaca gaggccatgt ggaagtgtta catcaccttt 360
tgcttggaaa gatttactaa gaagtcaaat agtgggttcc ttatagggaa gaggttggaa 420

<210> 399
<211> 400
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 399
cgttgctgtc gagaagttct tcgtcggcgc ctagcgacgc ccaacacctg tccaaacact 60
gcctgctgaa gatgaagtct tactacagaa attaagagag gaatcaagag ctgtctttct 120
acaaagaaaa agcagagaac tgttagataa tgaagaatta cagaacttat ggtttttgct 180
ggacaaacac cagacaccac ctatgattgg agaggaagcg atgatcaatt acgaaaactt 240
tttgaaggtt ggtgaaaagg ctggagcaaa gtgcaagcaa tttttcacag caaaagtctt 300
tgctaaactc cttcatacag attcatatgg aagaatttcc atcatgcagt tctttaatta 360
tgtcatgaga aaangttggc ttcatcaaac aagaatagga 400

<210> 400
<211> 423
<212> DNA
<213> Homo sapiens

<400> 400
ttccgaaaca agcccggctt ttggccgaag cggcctacgg ctgttataag acgactttaa 60
tgggtgggag agaatgttag cttttgaagc ttttttatgt agcgctcttc tctttttgtt 120
gataccccag gggtggctca cttgtattag agaatcttta cagtccttag ggtttctgaa 180
cagatgtttt tcctcccttа aatggtgaag tacccccacc tcttggccag gtggaagtgg 240
atgagtctgg accactggga tcagtgcagg gaagagccca gggaaaattt ctggggacat 300
agagccacat ttcagttttc ttcccaggga agaacagatt gtcaggacac tggatcccaa 360
tgagtgggac gtactaaatt cttagcaagt gcacattaaa attcagggta ggagagaagg 420
ata 423

<210> 401
<211> 380
<212> DNA
<213> Homo sapiens

<400> 401
gcaataaatt gtaaaagaag cattcatatg cttctgttaa atccactgtc ttttttgag 60
acagaatttc gtacttgttg cgcaggctgg agtgcaatgg caccatcttg gctcacctca 120
acctccgcct cccaggttca agcgattcta ctgcctcaat ctcttaaata tctcggcata 180
gaacactcat gccccgcccg ccatcctgac tcagttactg tccatatctc cctcagcctc 240

aacatacctg ctctcccagt tttacccacc tcttacccca ctcatctctt cccaccacgt 300
cgtaccacag caacaagaac ccattctctc ctgttcattc cctcgactta tccacgacaa 360
ctaatcaccc tgtattcccg 380

<210> 402
<211> 402
<212> DNA
<213> Homo sapiens

<400> 402
cgttgctgtc gccttcctca aagcatggtt gctgagtacc cagagttgcg aggagttttt 60
taactgattt agccaggtgg caatcatgag tgaatggatg aagaaaggcc ccttagaatg 120
gcaagattac atttacaaag aggtccgagt gacagccagt gagaagaatg agtataaagg 180
atgggtttta actacagacc cagtctctgc caatattgtc cttgtgaact tccttgaaga 240
tggcagcatg tctgtgaccg gaattatggg acatgctgtg cagactgttg aaactatgaa 300
tgaaggggac catagagtga gggagaagct gatgcatttg ttcacgtctg gagactgcaa 360
agcatacagc ccagaggatc tggaagagag aaagaacagc ct 402

<210> 403
<211> 400
<212> DNA
<213> Homo sapiens

<400> 403
ggcacgcggg tgccttctag cttataacca ttttccttgt ctcttctggg ttgggcagga 60
ctgacactcc gaacctggcg gaagaaggct catcttcctc gcacagtgtg ggttcttgga 120
gttcatccag ggaaggcggc gcctctttct caggtcctgc aggctggtct ctgagcctgc 180
ccccacgaac tttctggatt ccaaggaggg atggtgagcc ctttgacctc tgcagaccct 240
ctacttgcga aaagcagcat tgaagcagcc ttttcccatt gtagaaggga cagggagtca 300
gatccccttа acccccccggc tttcaggacc ccagaagtgc cttccaagct tcccccaaga 360
tccacatcac ccacgaacct gccactgttt ttgctgtgcc 400

<210> 404
<211> 399
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(399)
<223> n = A,T,C or G

<400> 404
ggcacgaggc ccgctgggcg actgcctgcg ggactgggag gatctacagc aggacttcca 60
gaacatccag gagacccatc ggctctaccg cctgaagctg gaggagctga ccaaacttca 120
gaacaattgc accagctcca tcacgcggca gaagaagcgg ctccaggagc tggccctcgc 180
cctgaagaaa tgcaaaccct ccctcccagc agaggccgag ggggccgcac aggagctgga 240
gaaccagatg aaagagcgcc aaggcctctt ctttgacatg gaggcctatt tgcctaagaa 300
gaatggattg tacctgagcc tggttctggg gaacgtcaac gtcacgctcc tgagcaagca 360
ggctaagttt gcctacaagg acgagtatga gaagttcan 399

<210> 405
<211> 408
<212> DNA
<213> Homo sapiens

<400> 405

cgttgctgtc ggcaggggct aggggtggag gccagggttc caaggaaaag ggccgaggga 60
gttggggagg ccgccaccac caccaccacc cactgcctgc agcaggcttc aaaaagcaac 120
agcgcaagtt ccagtatggg aattattgca aatactatgg gtaccgcaat ccttcctgtg 180
aggatgggcg ccttcgggtg ttgaagcctg agtggtttcg gggccgggac gtcctacatc 240
tgggctgcaa tgtgggccat ctgaccctga gcattgcctg caagtggggc ccgtcccgca 300
tggtgggcct ggatatcgat tcccggctca tccattctgc ccgccaaaac atccgacact 360
acctttccga ggagctgcgt ctcccacccc agactttgga aggggacc 408

<210> 406
<211> 405
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(405)
<223> n = A,T,C or G

<400> 406
cgttgctgtc ggcaggggct aggggtggag gccagggttc caaggaaaag ggccgaggga 60
gttggggagg ccgccaccac caccaccacc cactgcctgc agcaggcttc aaaaagcaac 120
agcgcaagtt ccagtatggg aattattgca aatactatgg gtaccgcaat ccttcctgtg 180
aggatgggcg ccttcgggtg ttgaagcctg agtggtttcg gggccgggac gtcctagatc 240
tgggctgcaa tgtgggccat ctgaccctga gcattgcctg caagtggggc ccgtcccgca 300
tggtgggcct ggatatcgat tcccggctca tccattctgc ccgccaaaac atccgacact 360
acctttccga ggagctgcgt ctcccacccc agactttgga agggn 405

<210> 407
<211> 409
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(409)
<223> n = A,T,C or G

<400> 407
cgttgctgtc ggcttcctag ctaccaataa tttgtctttg tctcagcaac taaaggccat 60
ttatgtggag tatggctacc atattactaa agcttcctat tttatctgcc atgatcaaga 120
aaccattaag aaattatttg aaaacctcag aaactacgat ggaaaaaata attatccaaa 180
agcttgtggc aaatttgaaa tttctgccat tagggacctt acaactggct atgatgatag 240
ccaacctgat aaaaaagctg ttcttcccac tagtaaaagc agccaaatga tcaccttcac 300
ctttgctaat ggaggcgtgg ccaccatgcg caccagtggg acagagccca naatcaagta 360
ctatgcagag ctgtgtgccc cacctgggaa cagggatcct gagcagctg 409

<210> 408
<211> 402
<212> DNA
<213> Homo sapiens

<400> 408
cgttgctgtc ggaagagtta gtagtaggtt atgaaacctc tctaaaaagc tgccggttat 60
ttaaccccaa tgatgatgga aaggaggaac caccaaccac attactttgg gtccagtact 120
acttggcaca acattatgac aaaattggtc agccatctat tgctttggag tacataaata 180
ctgctattga aagtacacct acattaatag aactctttct cgtgaaagct aaaatctata 240
agcatgctgg aaatattaaa gaagctgcaa ggtggatgga tgaggcccag gccttggaca 300

cagcagacag atttatcaac tccaaatgtg caaaatacat gctaaaagcc aacctgatta 360
aagaagctga agaaatgtgc tcaaagttta caagggaagg aa 402

<210> 409
<211> 405
<212> DNA
<213> Homo sapiens

<400> 409
cgttgctgtc gccataatgc aactggtagc cacagagtac ttattcattc atttcccaga 60
tcatcatgaa ggacacttaa ctttgttgcg aagctctttg gtgaataata gaactcaggc 120
caaggtagcg gaggagctgg gcatgcagga gtacgccata accaacgaca agaccaagag 180
gcctgtggcg cttcgcacca agaccttggc ggacctttg gaatcattta ttgcagcgct 240
gtacattgat aaggatttgg aatatgttca tactttcatg aatgtctgct tctttccacg 300
attgaaagag ttcattttga accaggattg gaatgacccc aaatcccagc ttcagcagtg 360
ttgcttgaca cttaggacag aaggaaaaga gccagacatt cctct 405

<210> 410
<211> 411
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(411)
<223> n = A,T,C or G

<400> 410
cgttgctgtc ggccggcgcg gcctcctgct ctttgtggat gaagcggacg ccttccttcg 60
gaagcgagcc accgagaaga taagcgagga cctcagggcc acactgaacg ccttcctgta 120
ccgcacgggc cagcacagca acaagttcat gctggtcctg gccagcaacc aaccagagca 180
gttcgactgg gccatcaatg accgcatcaa tgagatggtc cacttcgacc tgccagggca 240
ggaggaacgg gagcgcctgg tgagaatgta ttttgacaag tatgttctta agccggccac 300
agaaggaaag cagcgcctga agctggccca gtttgactac gggaggaagt gctcggaggt 360
cgctcggctg acggagggca tgtcgggccg ggagatcgct cagctggccg n 411

<210> 411
<211> 360
<212> DNA
<213> Homo sapiens

<400> 411
ggataagaaa tattcagctt ggtttctttg gaagtatatt tggattaatg ggtgtataca 60
tttatgatgg agaactggta tcaaagaatg gatttttca gggatataac cgactgacct 120
ggatagtagt tgttcttcag gcacttggag gccttgtaat agctgctgtt attaagtatg 180
cagataatat tttaaaagga tttgcaacct ctttatcgat aatattatca acattgatct 240
cctatttttg gcttcaagat tttgtgccaa ccagtgtctt tttccttgga gccatccttg 300
taataacagc tacttttttg tatggttatg atccccaaac ctgcagggaa atccacttaa 360

<210> 412
<211> 405
<212> DNA
<213> Homo sapiens

<400> 412
cgttgctgtc gctggatcac ggctgctaat ctggatgaag cccatgggaa cactcatatg 60
gtggagagga tcattgaccg agccatcacc tcgctgcggg ccaacggagg ggatatcaac 120

cgggagcact ggatccagga tgcctacgaa tgtgacaagg ctgggagtgt ggtcacctgc 180
catgccgata tgcgtgcegt gattgtgatt gggattgagg aggaagatcg gaagcatacc 240
tgcatggagg atgctgacag ttgtgtaacc cacaatgccc tggtgtgtgc acgagccatc 300
tacgcctacg ccctgcaggt gttccccagc aagaagagtg tgtggctgcg cgccgcgtac 360
ttctagaaga accatggcac tcgggagtcc ctggaagcac tcctg 405

<210> 413
<211> 400
<212> DNA
<213> Homo sapiens

<400> 413
cgttgctgtc ggggcatcag ccccctcccg ggcggagagc gcttcccgta cccttctttc 60
cactgggacc ccatccggga ccccttgagg gatccttacc gagaacttga cattcaccgg 120
agagacccgc tgggcaggga cttcctgcta aggaacgacc cgctccaccg gctctcgact 180
ccccggctgt acgaagccga ccgctccttc agggaccggg agcctcacga ctacagccac 240
caccaccacc accaccaccc gctgtctgtg gaccctcggc gggagcacga gcggggaggc 300
cacctggacg agcgggagcg cttgcacatg ctcagagaag actacgagca cacgcggctc 360
cactccgtgc accccgcctc cctcgacgga cacctccccc 400

<210> 414
<211> 399
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(399)
<223> n = A,T,C or G

<400> 414
gagaagcaca cctacacctc atgggatctt gaggacatgg aaaaataccg catgcagtcc 60
atccggagag agagccgtgc tcggcataag gtgaaagggc ctgtcatgtc ccaatatgat 120
aacatgaccc cggcggtgca ggacgacttg ggtgggatct atgtcatcca tctgcgtagt 180
aaatcagatc ctgggaaaac tggacttctc tcagtggcag aatgaaagga gagccgccat 240
gcagccaagg ccatcagtcc cgagggagag gaccgcttct ataggaggca tcccgaggca 300
gagatggaca gagcccacca tcacggaggc catggtagca cgcagccgga gaagccatcc 360
ctgcctcaga agcagagcag cctgaggagc aagaagctn 399

<210> 415
<211> 348
<212> DNA
<213> Homo sapiens

<400> 415
aaagggtggg agtggggcta cagataaaaa actatacagt aagtataatg tacactgctt 60
gggtgacagg agcactaaaa tcttataatt cactgctata taattcaccc atgtaacgaa 120
aaaaacgctt ataccccaca agctattgaa aaaaaaaaaa gtatcccttа ggaatacaat 180
ttttttttg aggctgtacg gcaggtgacc tatttttatc ataaactcaa aagggtttgg 240
ctaattttta catacatact ctaggggcta atttcacagg gtagcacaag gctttaacaa 300
tttccttgct caattaaatc aatttaacaa taaactggaa aatgaaag 348

<210> 416
<211> 360
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(360)
<223> n = A,T,C or G

<400> 416
atggctttgg cctctgagtc tttccaagca gtggcgttgg tgggtctgcc ctccgcaaga 60
catctgtcgt gagtgtgact cttcttcaga tcagcaacag cagtcgttcc ctccccccgaa 120
ctcattctca agccagtcag taagactctc ttcaaaggga gttgtcctgt aagtcctggc 180
aaccgagtgg tgcagcttag gagtgctgct atgcgtttta aaacggacag ctggccgggc 240
gcagtggctc acgcctgtaa tcccaacact ttgggaggtc gaggcgggag gatcacttga 300
gggcaggagt tcaagaccag cctggccaac atagagaaac cctgtctcta cgaaaaaaan 360

<210> 417
<211> 344
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(344)
<223> n = A,T,C or G

<400> 417
gggaaatttg attattgata aatcatttga tattagtgag aaattgttaa ttaagagtga 60
taatgacatt atggttatgt aagaaagtgt ccatatttta gagatgctaa tagaaggatg 120
aagaaataaa atgatgtgac ttttgtgttt gcttaagtta ctttggtaaa gaaagaaata 180
ataaaaaaac taaatgaagc atatttgttg aagatcattt gaccatatac acaagagttt 240
atttctgggc tctatttttat tccattggtc tatttgtctg ttttcatgcc agcactacac 300
tgttttgatt actatggctt tgtaatatgt tttgaaatca ggan 344

<210> 418
<211> 219
<212> DNA
<213> Homo sapiens

<400> 418
ttccttcaaa ttctgtctat atagtatttt agcaaaccta tgctagtaac attagaaaaa 60
aaataaattt actaaccaaa gactttatga aggtcataca tgaagaaatg ggtgttttag 120
taagaaacag aaatttctta agcttctcat tagatttctt tagattttag ttcaaaatag 180
atttgagtga gtttatttct gatgcgttgc tttaccctg 219

<210> 419
<211> 344
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(344)
<223> n = A,T,C or G

<400> 419
gatgccttga gagtttcctg ttgcacaatc tgtttgtctg tagagaagtg gcatccagag 60
ggcggtaggg gaggaaaaaa aaatgaagta atgggacaga gcagacacag gtaaagaggg 120
ccttaggtcc tcaggaaagg ggaaagggag ggatatggcc cttccctcca ggtcctcata 180
tttgttgccc cttgttctgg aacggaccca gaggcttgcc ttcagagggt tctaatttac 240

tctgtattcn tgtgtggaaa agcaagaggc agcatgtcca gtggactgtg agactgagca 300
ctctaaagcc agtagggtca agtcactggt agcccactgg cacc 344

<210> 420
<211> 353
<212> DNA
<213> Homo sapiens

<400> 420
cagtacattg ggcaaataat gattacgatg agaggcatga cagtgaatgg atgaaacgat 60
tctgtttttg ttttttttt ttcccccaaa attgagtccc ctcaattttt ttcaccgtta 120
tccacagact tcaaaggctt aattactgcc tgttagattt aggaggtttt aaattttgcc 180
ccctatgttc cttgaaaaca ccgctcttta aaaaaggggg aaaaggccgg gggcggtggc 240
tcaaacctga aatcccaacc tttggggagg ttgagtcagg cggttcacaa gggcgggaaa 300
cctacccttt ttactaacgt ggttaccccc gctttactaa actcccaata ttg 353

<210> 421
<211> 381
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(381)
<223> n = A,T,C or G

<400> 421
cgttgctgtc ggatatgatg ttttattcct agcctttctt caacacatgg attcattctg 60
caaagcaggt gagagaggag gcaggtcagg tctttactag aaagccttac ctgacaccag 120
atgctgtaga gaaacccagt ttctagaagg ctgtcattgt ccacaggtct ggggagaact 180
ctttttttct tgcacatctc aaccctcttc atttggggaa ttcacaattg tgtaagtctt 240
ggtggaagac aggatcctgt ttctggtcaa ggaaaataca aggtcagata tgttgtctcc 300
ctgaacgttg gtgtgtgaat cagggttcct cagagaaaat agaaccaata ggggcttgtg 360
tgtgtgtgca cgtgtgcacg n 381

<210> 422
<211> 358
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(358)
<223> n = A,T,C or G

<400> 422
ctaatacata ggataaatac ttgaggtgat ggatacccta tttaccctga tgtgattatt 60
attcattgca tgcctgtatg aaaatatctc atgaaaccat aaatatatac cctagtatct 120
acccatggaa ataaaaatta aaaaaataat aataattaaa aaaacagtaa agcagacatt 180
atagggaagt tttcaaaaaa agaaactaaa ataaggtaaa ataacaaggg ctcaatcttc 240
tgtttttgnt catttattca cactgctgcc taacataaaa gaaatatacg aacataaatg 300
ggaagaaatt ccatccagaa ctctatcata tttacctttt ttaaatcttg gttaaaaa 358

<210> 423
<211> 356
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(356)
<223> n = A,T,C or G

<400> 423
ggaagaaatg catcactagg ggttgattcc caatctgatc aactgataat gggtgagaga 60
gcaggtaaga gccaaagtca ccttagtgga aaggttaaaa accagagcct ggaaaccaag 120
atgattgatt tgacaaggta ttttagtcta gttttatatg aacggttgta tcagggtaac 180
caactcgatt tgggatgaat cttagggcac caaagactaa gacagtatct ttaagattgc 240
tagggaaaag ggccctatgt gtcaggcctc tgagcccaag ccaagcatcg catcccctgt 300
gatttgcacg tatacatcca gatggcctan agtaactgaa gatccacaaa agaagg 356

<210> 424
<211> 356
<212> DNA
<213> Homo sapiens

<400> 424
tactgtcatt tgtgcatatg tagttacatt ttcctggaaa gacctctctg tcttttcaaa 60
ttgttatgtt ccttgaagac ccaattcaaa attaactttg tggtgtgaaa aatttctttg 120
ccattcctta gaaggaataa ttattcctga catacttaat atttgatatg tattactatt 180
ttatcgctac ctttggatac ttgtgtgtct ttactcacct cataaagagg ggttttatgc 240
accggctaat ctaacaacta cttcttaaaa tccgtgtatt aggacttgtt aatttataat 300
aaaggcccgt cggtcaactg cgtgctttaa actataaaaa tgggggcttt acacag 356

<210> 425
<211> 351
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(351)
<223> n = A,T,C or G

<400> 425
catttggcag cagtgaactg tctcaggaag gcattttaag gggagctggg attgtcatcc 60
tagggaaatg gccttttggc agcattgaac tgtctcagga aggcatttta agagggctgg 120
aattgtcaat tgtcatacta gggaaatggc cttgagcgaa taaaaactat gctagggttt 180
gttcaagtct ctttgtgtgt gtgtgtgtgt gtgtgtgtgt gtctgtgtgt gtgtgtctgg 240
gggtcangtg ggtgaaactg tgctgaaact tgcagatcgt ataggccaac ggtgaggcct 300
aaatgaaaag tgtgctcata gaggcccgat gtaagtttgc gcataaaagg g 351

<210> 426
<211> 358
<212> DNA
<213> Homo sapiens

<400> 426
atattctttc cacaattcct cttactggaa tattgagggg agaaaacaga ttgatgaaaa 60
acgtgcaaag ccagattact taacagttcg ctttcgcaag tctgaacact gaaagacagt 120
aggtaatatt ccttagagta gaggagaaag taatgtaaac ctggggttct tccctcaccc 180
aagatggtgt tatcaggtta aggtgacaga taaatatttt ttggtatgaa taatccaaac 240
aatatatcag gcttaagttc ttcctgaaag aaaaatgttc aatcacttaa aagagaacag 300
tataaggccg gacgtggtgg ctgacgccng taatcccagc actttgggag gccgaaga 358

<210> 427
<211> 345
<212> DNA
<213> Homo sapiens

<400> 427
tggaagaaga agaattgtct tgggccacac ataaaataca ctaacagtag ctgatgagct 60
ataaaaaaaa aaaaaaaagg ggctggccat atttttcagg attccccccc tcccaaataa 120
ccaaaaaagc cctccccttta aaggggctga acatggttgt taactgccca caccagtacc 180
cataaacccc atggggcttt gaaattttaa ttttattttt tatctgataa agttaaaatt 240
ttagtttctt gcccgggccc gggggttccc ccttattccc caccactctt gggaggcccg 300
agctctggtg ggtcccgagt ctaaataaat atatcctctt cttcg 345

<210> 428
<211> 321
<212> DNA
<213> Homo sapiens

<400> 428
tgtgcgaatg cttcacattt tccataaatc aaaagggaaa aaaaagttgt gagtgaaatg 60
tcattaacca ggacatttta gaaatgcaga acctggactt ttgattgcac accatagata 120
aaaatgcagg aaaccatagt ttccaactca tggcaccatc attttgtatc tttggggcta 180
taacttgccc tgggaagaac tatttcattt ctcaacaatt ctaactcttc ttctgaggaa 240
tcccagttac tactgagaat gagtccaata acttccttca atgttaagtc agtgatccag 300
ccagaatcag aaatattctt a 321

<210> 429
<211> 344
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(344)
<223> n = A,T,C or G

<400> 429
attttaagat aaccttgaaa agaatggaaa tggtacatca tttgaaaggt agtggggaaa 60
gtaagaaagt gtggaacagg aaaaaaaacc aagaacttaa gaagtaaaag caggtaagat 120
taaaaaaaag aaagactata aaaagaaggg gaaaaaaaaa catagaaaaa aaatcgaaac 180
acatcagtga ccagaataaa ggcaaacagt cactactgcc agttaaaaga cagattctag 240
gccaagcgtg ggggctcacg cctgtaatcc caacactttg ggaggccaag gcagatgggt 300
cacctgaggt caggagtttg agacctgcct ggccaacatg gtgn 344

<210> 430
<211> 369
<212> DNA
<213> Homo sapiens

<400> 430
ttcaggactg tgagaaataa atgcttttta gttataagcc acccaattta tgtgttttgt 60
tataagatcc cccaatggac tcagacaatt tggctggcca gttctggctc tgggtctccc 120
atgaggctgc catcgtacat cagccagggc tgcagtcatc tcaaggcctg actgggggca 180
tcttggaggc tggataccac aagtacctac catgagctag gtggtgtaca agtaatatat 240
agcaacaaca atcataatgt acaattggaa gttatttcat gtttactatg tgtccagatg 300
ttaagtactt tccctgagtt acctccttta tcttcataaa aaccctacaa atttggtctg 360

ggtatcatc 369

<210> 431
<211> 360
<212> DNA
<213> Homo sapiens

<400> 431
aggggcttcc cagacctgtg actgactgaa cacgtgtgtg tcattacagc aaagaccaat 60
aaggcttgca ggaaaaactt gttgaattct ctttgaccta aagtcaccca cattcattta 120
actgtgaagc tcttttcctc ccactgcgta gcatcctatg gatctatcat tctttaaaat 180
cggtatggga aattctggtg tagataccat ttgtaattag atagagtctc ttaacctctt 240
tggaacatac gccttttgag aaaaggatgg tcggaaggga ttgtgcacaa ttctgtgctc 300
ttcgaagccc accgaagacc cgcctccatg atcagggaaa gcaaagaagg gaacaaaaaa 360

<210> 432
<211> 355
<212> DNA
<213> Homo sapiens

<400> 432
gcctgagtga cagagtaaga ctccgtctca aaaaataaat taaaaaaaat tttttaatct 60
acataacact gatatataga aaaaatgacc atgctgaaac actgtggatt ttagaagcaa 120
tgcgctgttg atagcccaca atgattgtca gttcacatgc aagagtccca atgcaacctg 180
aggattaata tgcataaaac cgcagttgtt ctaaaggtac aagttactta catgcacata 240
cataatgtac acctacacgc agttttttaa aagacagaag aaatgtcaat agtaaccaat 300
gtcaacagca cacgttataa gtgtggaatt atggttttct ttttagtttt ctata 355

<210> 433
<211> 392
<212> DNA
<213> Homo sapiens

<400> 433
cgttgctgtc ggcaggctaa tgtttcatat gcatgtattt tatttttatt taaagttatt 60
tttacatggc agtggaatgt gccttcatct gtcaacatta accccattgg acttgcaggg 120
cactccctta aaaggaactg tcgcttaggg gattaggcaa ctaaaccgga cctcttgaat 180
tacttcttca ctgtgctttc tgaggaaatg ctgattggtt actgctaaag attccactaa 240
caattcaaat tggggatctt tgttcccatg gcatgaaaat gcccatgccc gcatgcaaaa 300
atgctgaggg tctgaaagac agattgtttt gtggaaagta aagagctctg gtctggaaga 360
agctgtttcc cttaagcgtg ttcgggtgtg at 392

<210> 434
<211> 355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 434
tcagcctccc aagtagctgg gatcacaggt tatctctagg atagcttcta acccaacatt 60
aagcactaaa ataaatattg cttccctttg cagtctctcc tagggccagc caagatggaa 120
tgggggatgg tcagaggaaa aaggggcaga gagtactctg cctcatccag ttccaaatgt 180
tggggtccct caaggctcag acctaggccc tcttctcttt cctctctaca ctctttccct 240

agaagtcacc tcatctgttg ccatgggttt gggtaccata gttatacact ggtaactcca 300
aaatccacat ctccagccca taactctcct ctgaatgcca aattctccac ttggn 355

<210> 435
<211> 308
<212> DNA
<213> Homo sapiens

<400> 435
ggtctcgaac tcccgacctc aggtgatcca cccgcctcgg cctcccaaag tgctgggatt 60
ataggtgtgg gccaccatgc ctggccaacg caaggtaaac ttttaacgtg gaatagaaaa 120
aataattttg ttaaatccct gggatggaaa taacatagcg accaaaagag tacatctttc 180
tctcacatgg caaagttttc ttcttgatgc tacagtataa aagtaaaaag cacggtttca 240
gtcttccacc agatgtttaa ccccaatccc cactgttgtt tttcacaaag cttttgggat 300
cacctgtt 308

<210> 436
<211> 373
<212> DNA
<213> Homo sapiens

<400> 436
cgttgctgtc gatttgaaaa ggttgtggtg tagttggtct gtaattaagt tgcagattta 60
aaactgctgt tagctttgta aatcaaaata taggtgtttt ttgtcctggt atatcgtcat 120
tccagctgca gatggaatcc cattgatctt ctagctacca ttcattttct tcactgttca 180
caaaagaaga gtgtgaaatt cagtgaatgc tgttactaat cctgttacga gatgaatctc 240
atttcaccaa aattaaatta tgtttttccg ctaaaatgat gatacaagtt gaagacacat 300
cactctgaaa ttggaagacc tcaccactta aggctccaca gtggcttact cagctgaact 360
ctaggttact act 373

<210> 437
<211> 355
<212> DNA
<213> Homo sapiens

<400> 437
ttctttttag gtgtattata atcatttgct tacatcagtt tcctttacaa aatttaggac 60
agaaatctag tctgattcat tctgatacta ctagagcata gtagaaagta gaatcttatt 120
aaacttctgt tgatttgatt aaaagggtac ataacgaagt gaaggcagaa ataaagatgt 180
tctttgaaac caatgagaac aaagacacaa cataccagaa tctctgggac acattcaaag 240
cagtgtgtag aggaaaattt atagcactaa atgcccacaa gagaaagcag gaaagatcca 300
aaattgacac cctaacatca caattaaaag aactagaaaa gcaagagcaa acaca 355

<210> 438
<211> 351
<212> DNA
<213> Homo sapiens

<400> 438
tagaatttta ttctatctaa ttcgtttata ctcccagagt tcgaaattac attttaccta 60
caataaatga gataacactt gcaaattata tggtactctg cctaacacac gttaataact 120
caatacatgt tagcaataaa cttttagtat agtagtcaaa gtattaattt ctcacattgc 180
aaagttcctt caaagacatg aatacaacct ttctaatgac tccttgttca tcaagatacc 240
tcttcaaatt attctattta cttcattcag tatattatct gtgtataccg atatgatatt 300
acactctttt ttttttttga aagggaatct aattctgtaa cggaggcggg g 351

<210> 439

<211> 348
<212> DNA
<213> Homo sapiens

<400> 439
acatttgcca cacggttggg agtccttcct tccttgctct gacactaaca cggctcttat 60
actcgacctt tgtcccctct gtctttttte tctctctttt ttttaactaa tggagacaca 120
ggcataggtt aaaatcagag atatcttgct caggttttca gagcaaacac tgtgttccag 180
cccacagcat acaatagtat atgcagaatt tagacactat cttcccaaac taaagagtga 240
acacctttca gtactttcta gaacaactct agaaagaaat atatagaaac agcaaccaag 300
tatttagcag tttttctaat ttgtaagacc ctttgggaaa aaaagaaa 348

<210> 440
<211> 370
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(370)
<223> n = A,T,C or G

<400> 440
gagatttgtt acggatttta gacatcttct aagtaactcc acagaagact ctcaaaacaa 60
aagcgtgacc tcaacctgcc tataggtgcc ctagtggaga atgcttgata ccaggtgaca 120
acccccacgc gccccaatag tgcaagaaca aagtggaggc cagagaaggg gctggtagtt 180
tcttcttagt tctcagaagg cttatctgat gatccactca cctctccttc caccttaagg 240
gaagaatgga agataataag caaaacttct agaaagagca attagccctt caacttctaa 300
tatccaggtg ngtcagttcc cagtgagaga ggtaagtggg caatggtaag ctgtgccaca 360
caccaggtag 370

<210> 441
<211> 363
<212> DNA
<213> Homo sapiens

<400> 441
ttccttttt ctgaggttct gaaacaaaaa caaaacgtag gctctgcaac agctgaagga 60
gcttttgaat tctttctgaa gaggaaattg actttaccta accaatgcac ttcctgtgta 120
tgctatatcc gctaaagagc aagacaggac ctcagaggca cagtgctcaa ctgcagaatt 180
tcctcttggc cattcgaaat gtattacagc gttctgacac aaggtcttca cttattctgg 240
tatctgtaat atgtatacaa agcaactgag ggtcctgtta aaaatacaga tttggccggg 300
tgcggtggct catgcctgta atcccagcac cttgggaggc tgaggcgggc agatcacaag 360
gtc 363

<210> 442
<211> 355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 442
attgcaccac tgcactccag cctgggtgac agagcaagac tgtctaaaaa caacaacaac 60

aacaacaaca aaaaaaccat aaaagaaaga aaaagagaga gaaaggaagc aaggaaggaa 120
ggaagatata aaaaagaaaa agaaagaaag aaaagaaaag gaaagaaaag aaagaaggaa 180
agagaaagaa agaaagaaag agaaatcgat cgaaagaaag aaacaaaaaa agaaagaaag 240
aaatccatct agtagctctg tgttggggga ttaaagagac aaatactggt ggctgggagc 300
ccagtgagga agctgtgggg aggaagtaag tacattggga tgctcagaga ctacn 355

<210> 443
<211> 367
<212> DNA
<213> Homo sapiens

<400> 443
tacagggaaa gggaattcca aaccaagtgc acagcacaaa caaataaatg aagacctaaa 60
gcattgaatc tttcatggac acttctaggc ctaaatccct tgactttata aatgtcatgg 120
taaattgcat aatgcatatc atcatgccaa aattcatatt ttataatgcc atatgttaga 180
tctccttact gtggtttcac ctgaggcaat cttctgaaat tttctttaaa aaaatgaaga 240
gttgtctggg cgcggtggct cacgcctgta atcccagcac tttgggaggc cgaggtgggt 300
ggatcacctg aggtcaggag ttcaagaaca gcctggacaa catggtgaaa ccctgtcttt 360
acaaaaa 367

<210> 444
<211> 356
<212> DNA
<213> Homo sapiens

<400> 444
ggatcaaatc cattgcagga atgaaggatt tatttttttt tcagtgtctg aagtactgcc 60
aacaaataac cctcagctct cagtcccctt gtggattgcc cctgctaaat aaagccacca 120
gagcctgatt tatgcctctt cctgaggtgg cctgtttcca atgacagacc actgttggag 180
tatgaaggcc taaccagctc atctaatttg gggagagctc taaagaataa ggttattttc 240
agctccagag tctcatgaca tctcaaacta catcatagct catcatcttc tgaccaaaca 300
gccttcttca tttcctgtct atgctattgc tccaaagagc atttcctaat aaacct 356

<210> 445
<211> 354
<212> DNA
<213> Homo sapiens

<400> 445
caccatcata tatgcatttt gttgttgacc gaaacgtcgt tatatattct ttccatacat 60
agcatgtgga aagaatagat ctcttttttt taattgttcc acactttacc atataatgga 120
atacgcaaaa tttcacaata cctttcagga tgtaaaatac atataccctt tgacgacatt 180
agaaaagaga aaatgtgggc cgggcgcggt ggctcatgcc tgtaatccca gcactttggg 240
aggccgaggc gggcggatca cgaggtcagg agatcgagac catcctgggt aacacggtga 300
aaccccgtct ctactaaaaa tacaaaaaac tagctgggcg tggtggcggg cacc 354

<210> 446
<211> 183
<212> DNA
<213> Homo sapiens

<400> 446
tgggttccgc tgtgagaaca cgacagatgg gttcggctgc catatgacga tagacaggta 60
ctcgctgcga tttcactgac tgattgtctc cgtctccata atttttctaa ttgttactgg 120
tgggagtctt ctccctgtct tgccttttg tttgtaatgt cttgacagtg ccgcgatccc 180
tcc 183

<210> 447
<211> 351
<212> DNA
<213> Homo sapiens

<400> 447
tcagcataca accctagatg atcttgtcgt gaagatgaag gagatcacag acaacatctt 60
gccagggtct gagttttaat gctggcgttt tagatatcct gttgggctac aaaaacatgt 120
caggcaagat gttaagtttt gtttaaagca tcaagaattc caggcccggc gcggtggctc 180
acgactgtaa tcccagcact ttgggaggcc taggcgggcg gatcacgagg tcaagaggtc 240
gagaccatcc tggttaacac ggtgaaaccc cgtctgtact aaatatacaa aaaatttgcc 300
ggccgtggta gcgggcgcct gttgtcccag ctacttggga ggctgacgca g 351

<210> 448
<211> 347
<212> DNA
<213> Homo sapiens

<400> 448
tataaatagt tatcaaatac tcacagtatt tcaggtactg ttttaagtcc tttggaaatt 60
ttctataatt aaaatttaca ataatctttc gagatagcaa ctatgattat tccaactttt 120
aaaaaattga agtttagaga ggataaacaa ttgcccatgg ccaggtagct actaagttac 180
agttccaaga ttcaaacata cagcttgact ccagagtcta tgcttttaat caatacttaa 240
aactgtcttg atgtagattc tgatgggata ttcagctatt tctcctcaga attgtatatg 300
tgggaatagt atctgaaaaa cttggattcc tttatatgta aggaaaa 347

<210> 449
<211> 346
<212> DNA
<213> Homo sapiens

<400> 449
ttccagttcc tgcttcataa cagatgctca acagatgttt attgattatg aaaaggatcc 60
ctgaaaagct ttctcctgga attagactct cagccctaga atagagcaag cctgcagaaa 120
cgagaactgg aggcttgaaa gtcctccata actgggttga agagaaacca ttttcctgta 180
atctttttt ttttttttt ttttggaaaa ggaatttttt tttggggccc gggggggaac 240
cccagggcct gctcgagagg tgcggaaacc ctgggtcgaa aagaccaccc aaagacgccg 300
cgccaacctt ctttttctg gggaaaaaag ggggctgccc ctcccc 346

<210> 450
<211> 350
<212> DNA
<213> Homo sapiens

<400> 450
catagaaatc caccattcac gtaagttttg gcctggtgtt attgcagtct cttaatttag 60
ccaacaaaga aggttggctc aaagacacct gtttttgcat gtaaagtatc aggctggaag 120
gcttggtcgg gcatggtttt agcaacagga ctttcatttg tgatagttca gtcacgtcct 180
ggggaattga ggagaagatc caccctacca aaggccagtc ttgctttagc accaaagaat 240
taattttaaa agttagagtt ggccgggcat ggtggctcac atctgtaatc ccagcacttt 300
gggaagccaa ggtgggcaga tcacctgagg ttaggagttt gagaccagcc 350

<210> 451
<211> 369
<212> DNA
<213> Homo sapiens

<400> 451
ggattattga gaacaacaga attcaaaacc cttgaaaaag aaaatgatgt gtatctatat 60
tttaagcaga aatacacaaa cacacttata gtaactacaa ataacatcta gtagctcaga 120
cctattgcca tttatttcat gttcaatatt gtacagacaa catactatga aaagtgatgt 180
accatattta tacgtataca ggtgaatttc aatccaacac taagataatt actttatgtt 240
gtagaaccat atataaatac ttttttgccc tgctctaacc attgcttatc aagactttaa 300
gattatgaat gaatggtcat acttattata tatagaaact attatttgat gaagggtact 360
tgcattcct 369

<210> 452
<211> 357
<212> DNA
<213> Homo sapiens

<400> 452
agaatagctt tcatcccaaa atttgcttgg aaatagttag atcatttgat ttaattttca 60
cttttataaa ataagtgtag gaatcctaaa attgattact tcatttgaaa cacaaattca 120
gtaggacgta atgcatgaaa taatttaatt tttgacatgt acatcgaatc ataatttaaa 180
aacaaggtct gaccaggtgt agtgcctcat gcctgtaatt ccagcacttt gggaggccaa 240
agtgggtgga tcacctgagg tcaggagttt gagaccagcc tggccaacat ggtgagaccc 300
catctctaca aaaaatacaa aaattagcct ggtgtggtgg tgcacacctg taatcct 357

<210> 453
<211> 264
<212> DNA
<213> Homo sapiens

<400> 453
gtgtgtagtg atcatctgta gttgttcaaa cgctctctga agcttatgct cttgttcatg 60
tcccattttt gagttgtgcc tacatgatgc tggcaacaga taagacatgt agttttaata 120
aatcactaac ctttatattc tgcttatttt taaattataa attccatctg tgtaaatagt 180
ttctctcttc ttgcacttta ctaaaagcag ttaaaagaaa ccattctgag gctgggcacg 240
gtggctcatg cctgtaatcc cagc 264

<210> 454
<211> 352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(352)
<223> n = A,T,C or G

<400> 454
tggtcttttg gtttttgttg tgttcatttc acagcanatc agtgagcgtg tccttactgc 60
ctggccccag ttcaagtcct ggtgttagtg cttcggcttt gaagtcagat gacctggggt 120
caagcctgtg ccttgccact gggtggctga gtggccttgg gcaagctatt tgctaaactt 180
tctgtttctg catgtataca aagtgaataa gactgattcc tttcctttgg aaggctgttg 240
aaggtcaggc ctggccactg attcttataa ttctttttac taaaagcaga ccgaaaagtt 300
taggatcgct ttggggccac tcctcttgaa ttcaagcctt gccccctttt cc 352

<210> 455
<211> 350
<212> DNA
<213> Homo sapiens

<400> 455
tacctccagg catgtggaca tgatggctag agctacagtc acatttttt tttaatacca 60
tgaggcaagt ctttggatga aagttagggg ttaagtaagg agaaacagaa gaatcatagg 120
cacctgggcc actgttgtta ctacagagct tctgcaccag ctctacctaa gaagaatatc 180
tcttcctaat cttagtgata tgtaggaaaa gaactctcta tttgtttaag ccatttttt 240
tcctagactc tcttataagc agcaaaaaaa agtcccaatg tggtggcccc ttcccatagc 300
ctctgaaatg aaagaaatgg gttagaaggc agaagtggat atagatgaat 350

<210> 456
<211> 380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(380)
<223> n = A,T,C or G

<400> 456
cggtgctgtc gggattatta tgtttggaag attattattt ttgaaagaca acttttctgt 60
tgccaaactg tcttctaaag aggttgttca catttctagt ctactaacaa tttatgaaaa 120
tgcccacctt ccatgggggа atattaaaga ctttgcctga aatgatagaa ctctattggg 180
tagtggctga agtaagtttg agttggtaaa tcaggggtca gattatggaa aaacttacat 240
gttggagaat cagctattct cttggtgagt ttcttctttc tttgacagat taacaacttt 300
ccagcaggcc aaatgagaat tattggctag ctttgtggag ctgtgaggga accctcttan 360
aagatttctc attctctctn 380

<210> 457
<211> 395
<212> DNA
<213> Homo sapiens

<400> 457
cgttgctgtc gatttttgaa ttttttcgca gagacagggt tttgctatgt ttctcaggct 60
ggtctaaaaa ttccagagct caggtgatct gctcacccta gcctcccaaa gtgctgggat 120
tacaggtgtg agctaccgca tccagccccg aatattcttt cagaggtagg gttttgtgtg 180
ttttgttttt agttcaagca gtttgactac atcctaaggt ataaaggtac taataaacaa 240
gtcagttttt cttttgtgca ttttttcttca ttttagagcc ttcagggaaa tttttttta 300
gaaagatcaa gagaaggcca ggcgtggtag cttacgcctg taatcccagc actttgggtg 360
gccgaggtgg acagatcacc tgaggtcacg agttg 395

<210> 458
<211> 356
<212> DNA
<213> Homo sapiens

<400> 458
cggggttggg gttgccgata ccactgctgg tatgctgtgt aaaaacagcc ttgtttgagt 60
agattgcgag gctatcgcta tattgacttc cctcttcagc tgcgttattg aggatcacaa 120
cttattttgc cagcactcta cgctatggga ccacatagag gtgctctaag atagtaacat 180
taaagaggac atataatata accaaaaatt tgagttccag ataagtttgg tgtctcacta 240
gcaagatgac gttaaataac tcatttaatt tttttgaaat cttaattttc tgttcctgaa 300
aataaaaagc aatctgtctc ttgtccaaaa gactatgtag ggtttttaaa aatttt 356

<210> 459
<211> 393
<212> DNA

<213> Homo sapiens

<400> 459
cgttgctgtc ggtggcgggc gccggtagtc ccagctactg ggaggctgag gcaggagcat 60
cgcttgaacc cgggaggcgg aggttgcagt gaaccaagat cgcgctactg cactccagcc 120
tggcgacaga gggagactcc gtctcaaaaa aaagccgggc agaattaatg attttgaagc 180
tccgagaaac aggattaaat tcctctttca aaccgaaatc ggaatttgat tttttaaaag 240
tgtaaaatac cataaacttt taaggttagt tgttcggtaa ccatgtcacc aattttaagg 300
cactttctga gttgtgtata gtttctccag agccctaggg gaaatgtttt gcaaaatatg 360
cacgtttagc tttccaaaac aagttgtctt ttt 393

<210> 460
<211> 346
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(346)
<223> n = A,T,C or G

<400> 460
cgggaaggaa gattacctgc tgtcaaatta gaaaattaca attaaaccat tgatatttcc 60
gtgagaagag aaaactagta accgtgaaga agtgagggaa aacaaatgat gacgtcatgt 120
taacaatagg aaagacatgt ccttttgtaa aagatgctgt cacccatcac agactatttc 180
ttccaatatg gatttgcaaa acatgacagt cgagctcacc aaatctctcg tggttgccgt 240
ggggcagggc gaggtggccc acacctgtaa tcccagtact ttgagaggcc aaggagggag 300
gattgcttga gcccaggagg tcaaggctgt aatgagccat gatcan 346

<210> 461
<211> 353
<212> DNA
<213> Homo sapiens

<400> 461
ccatgtgagg tgacgcccca ccctgcttcg gctctccctc tgtaggctgc acccactgtc 60
caaccagtcc caaagagatg taccaggtac cttagtggga aatcactcgt cttctgcgtc 120
aatcacactg ggagctgcag accagagctg ttcctattca gccatcttgg aacagacctc 180
ccatggtagc atctttaaac tgaaatattg gacagagagt ttccattgct gtagtatttt 240
gcttaattat tatctttata gcagggataa tagttgacaa aaaggaagca tgaaagtttt 300
accatcactg agtctgctag gccttttttg gggtctagta atgcagtttt aaa 353

<210> 462
<211> 347
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(347)
<223> n = A,T,C or G

<400> 462
gagtagcagc agtgacttaa cagatttttt tttcattgct gctgcttctt aatccctttt 60
gagcctcaat ttctttttgt ataaaagggg aacaataacg attttgtaga gatgaggtat 120
gcaaagtctc tggctgcagt gagcactcag taataagagc tatttattgg gccaggattc 180
caactacttt cataaaaata gcaggaaagt caaatggaaa gctgacttga tggtagggga 240

ggcttctgcc caccaactag ttccacgttt ctcaaccctg cactgaatgt taaaatcacc 300
tggggaactt ctgaaaaatt atgatgtctg gtcccaaccc catggan 347

<210> 463
<211> 359
<212> DNA
<213> Homo sapiens

<400> 463
cgggtgactc aatgtattca caggcttcaa aaatatgctc taagaaaaaa atgggggaaa 60
aggaacagtt tttcatttca aaagaattcc agccaatgaa tgtcaaagga aagagggaaa 120
tacagtatca ccattaggca aacaccacag taataattat tgctgataag atccactaat 180
ggatgctaag attaatgggc aaaagttgag gagaaataag atatttgccg aagcctcaaa 240
ggtatctccc tcaagatatt tattaataca agccgtgcgc ggtggctcac gcctgtaatc 300
ccagcacttt gggaggccga ggcgggcgga tcacgaggtc aggagatcga gaccatccg 359

<210> 464
<211> 225
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(225)
<223> n = A,T,C or G

<400> 464
ttccttcaaa ttctgtctat atagtatttt agcaaaccta tgctagtaac attagaaaaa 60
aaataaattt actaaccaaa gactttatga aggtcataca tgaagaaatg ggtgttttag 120
taagaaacag aaatttctta agcttctcat tagatttctt tagattttag ttcaaaatag 180
atttgagtga gtttatttct gatgcgttgc tttaccctga ttacn 225

<210> 465
<211> 397
<212> DNA
<213> Homo sapiens

<400> 465
caattctgca cgagcctagc tacaggtttt aggtatgata aagacttggt taccacaaat 60
agctgaccag aaaccataat tgggcggagg caagcatcag ctgaccaagc attttccaag 120
ccaccacagt gattcagctg cttcctctcc tgcatctcct atggaaaaga tggaccaaac 180
acagctagga catcaagctt taaaaccaaa gcaaccttgg cacctcacac aatggccagc 240
tatgaacctc acctggatcc acaccactcc aatttgcaac ccccctctca gctccccagg 300
tactatctcc tttagccatg gacctttaag cactggaacc ggcattggcg tattcttttc 360
ctccgcatgg agtgcaaccc ttctcccact ctgcccg 397

<210> 466
<211> 347
<212> DNA
<213> Homo sapiens

<400> 466
tagataagta ttggtcaact ttgatgaatc acccataacc ttaaactaat aagtcaaaac 60
ctctttatac tttgacaaag caccattaga tgattcttag gtccaccaaa ggttgataat 120
cactggccta gatgatacag caataggtaa aactagggtg acagcagtgg aaatggtagg 180
ggataactac caagaaactg ttttcagtaa gaactaaaag gcattacaga ttgatgaaat 240
gtaagaatat gaagacaaac agtcaaagat ttaaatcttg attactgaaa aacttacgat 300

actattaaaa gattaagaag tcaggaggag cttaaaaacc tagagaa 347

<210> 467
<211> 366
<212> DNA
<213> Homo sapiens

<400> 467
agggcaagac tatacagact ttaactttga attcccccaa attagtacag ggtttagtac 60
agagaaagga cttgatacat ttttatacac ttttgaagaa taaattgata tttatttagt 120
actcagtgtc agccaagcac ttaaacactt tacattcatt accccatggc atcctcacag 180
ccttctgagg tagaaagact cactgaaggt tcagtaaagt ggggaggaag gcacgacttg 240
aactcaggtc tgtctgactc cagatgtctt agaaaggtag aatctttcac ttggaagaca 300
gtatggttaa gatcatgttc tccgggccgg gcacagtggc tcacacctgt aatcccagca 360
ctttgg 366

<210> 468
<211> 346
<212> DNA
<213> Homo sapiens

<400> 468
tacctgtgcc caagcagaca tctccccccaa tttgtgtatt tacacccctc ctgcctgcag 60
aaaggatgaa acaggattac cctcaaattt acagctataa ttaaactatt attaaaatcc 120
aggtaaaaaa acaagagcac tgcaaagaag agcgtgtgtg tgtgtgtgtg tgtgtgtgtg 180
tgtgtgtgtg tgcgcgtgta taaaaatttt gtcacacaca cctgggctgg ggcagcttct 240
ctgggatccc tgaatcacag agtgctagca ccagaggggc tttcagagat aaacacgctt 300
cacctgtttt tatataggac tgacacagat taagagattt ggcagg 346

<210> 469
<211> 189
<212> DNA
<213> Homo sapiens

<400> 469
atatacgtgt atttttggg acttgcctgt ttctgttaat atcggagtgt taaagaacat 60
ctctgagtaa tttggttttg tcattgaact atttttagta cattcatgtc tgaagagtga 120
tgtgacttga gaactaagct tcttcctgct ttacattcat catttttcca gaagccacgt 180
agtgtgcca 189

<210> 470
<211> 348
<212> DNA
<213> Homo sapiens

<400> 470
gggaaatttg attattgata aatcatttga tattagtgag aaattgttaa ttaagagtga 60
taatgacatt atggttatgt aagaaagtgt ccatatttta gagatgctaa tagaaggatg 120
aagaaataaa atgatgtgac ttttgtgttt gcttaagtta ctttggtaaa gaaagaaata 180
ataaaaaaac taaatgaagc atatttgttg aagatcattt gaccatatac acaagagttt 240
atttctgggc tctattttat tccattggtc tatttgtctg ttttcatgcc agcactacac 300
tggtttgatt actatggctt tgtaatatgt tttgaaatca ggaagtgt 348

<210> 471
<211> 187
<212> DNA
<213> Homo sapiens

<400> 471
atatacgtgt atttttgggg acttgcctgt ttctgttaat atcggagtgt taaagaacat 60
ctctgagtaa tttggttttg tcattgaact atttttagta cattcatgtc tgaagagtga 120
tgtgacttga gaactaagct tcttcctgct ttacattcat catttttcca gaagccacgt 180
agtgggc 187

<210> 472
<211> 188
<212> DNA
<213> Homo sapiens

<400> 472
agtggaacga tatcttcaga acgctgagag cgaagaattc tcaacctaga agtattccag 60
agagcgtacc ttctatgaat gcagataaaa taaagacaat ttgtagataa acaaaaactg 120
cagcatttat taccaaggga ctaaagtaat gtctaaagaa tctatttcag gaaggaggat 180
aaacatgg 188

<210> 473
<211> 393
<212> DNA
<213> Homo sapiens

<400> 473
ggcacgagct ggggaggagc caaagccttg gcgctcacct aagccgcagg gagatacacc 60
caactgggag atgaggaaac agcaacccac agaggagaac taacccacac aggatcattt 120
cgtgaaggag caaggctgaa gaaccagacc tggacttttct taggcaagta aattctgatt 180
atatcacgga gacttgcttt gagaaatctg ccccttttca ctgtgagatg gcgtcattaa 240
cacatctagt tctctcctaa gcagccagca aacatttatt atacactaga tattatattg 300
gcatttgaga tgatacaaag gaataaaatg gggcaattag ctctagtaat ttggaggtct 360
caacttacgg atattccaag ttcctttgaa acg 393

<210> 474
<211> 369
<212> DNA
<213> Homo sapiens

<400> 474
tgtgtctaag gaactgaatg tttaatgtga cttaattttc attgacttat aagcaacaat 60
gccacctgaa ctttagcatt tcttatatcc tcagcccatt tttactttag caccctagca 120
aacattcaga agtgacatgg tcatttttctt ccttctggga tggagcgttg gctctcttta 180
ttgtcattaa gatctttgaa agcaataaga agatataatt agccgggcat ggtggctcac 240
gcctgtaatc tcagcacttt gggaggccaa ggagggtgga tcacctgagg tcaggagttc 300
aagaccagcc tggccaacat ggtgaaaccc catctctact aacaatgcaa aaaattagcc 360
gggcctggg 369

<210> 475
<211> 358
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(358)
<223> n = A,T,C or G

<400> 475

tctccatctc aaaaaataaa taaataataa aggtaggggt ttcttaattc ttttagacag 60
atatcctcac attaatctgt aaaggacaaa aaaataagac tttaaactct taatttgaaa 120
agatatctcc atttaaatct cctttgctta ttttattgac cacctccttt gcggatttca 180
tttcctatcc ttgatttaga aaaaggttaa gggccggtcg tggaggctca tgcctagaat 240
cccagcacct tgagaggctg acgcaggtgg atcatgacgt cacgagatca ngaccatcct 300
ggctaacaca gtgaaacccc atctctacta aaaatacaaa aaattagccg cgcgtgtg 358

<210> 476
<211> 365
<212> DNA
<213> Homo sapiens

<400> 476
ttagcctttt gtatgctttt actggataat tttctctaag gtagagggtg aggagctata 60
tattatgtaa cattttagaa atagcagaaa accatttagg gggaagaaca cacaccaaaa 120
ctacccgata acttctttcc tgattaaaat tatcttccaa caattcaatt atatgtaaag 180
agggaaccgt ggctacacac gtatttatta actgtttctg gcggtccaga ggaagctgga 240
ttatttttac cataacaaaa tcaagttttt ttcagccggg cgcggtggct caagcctgta 300
atcccagcac tttgggaggc cgaggcaggc ggatcacgag gtcaggagat ggagaccatc 360
ctggt 365

<210> 477
<211> 366
<212> DNA
<213> Homo sapiens

<400> 477
gcgctctgtg gctgggcatt ttaaacctga cctttctggc tctgagtttt tccattttaa 60
acctgacctt tctggatcca ggcgaaggca gagacaagat aaaataggat tattggatgg 120
cagaatgtat tcaactattt ctcctgaaac ttggaaccgt attataccat gggggatacc 180
acactgacgg aaacggtgga taaatgtgag ttcatatata ctcctccaca aatatacatg 240
tctcatgctg ggcgcattgg ctcacgcctg taatcacagc actttgggag gccaaggccg 300
gcccatgact tgaagtcacg agtgtgtgac cagcctgacc aacatggtga aaccctatgt 360
ttactc 366

<210> 478
<211> 367
<212> DNA
<213> Homo sapiens

<400> 478
ggatcaatac aacaaagttt tctgtttaga aaatacaaaa aaaaactata aatctctaaa 60
gaaaaaaggc cgtgtcctct gaactatgcc acagatatag aatgtagaaa gattgtataa 120
tcattacatg tttaaagtag atggtgaaag cctagctcgg cacctaggac ggcacaaagt 180
aaatccttaa caaatgcctg taagtagtcg gtacttttgt aaagaaaagg ctccatgttt 240
ttgttgttct ggaggtgtgt gtgtgtgtgt gtgtgtgcga ccctcaacac cgccacataa 300
ttactaacta accctgtgta cggtagtccc ccctttttct tataaacggc ccctcattct 360
ttatttc 367

<210> 479
<211> 367
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(367)

<223> n = A,T,C or G

<400> 479
gcatccagca cgggataaag aggctgtgag aaggatgaac agatttttgg aagacgcaca 60
tttttgtaaa gctaactcag atagacttca ctccgtcctc atgccctgcc agtatcttta 120
attttaaaag aggaagaagg aagcatcgtc tcttctcccc aacagataat actgggtgct 180
ctgtgcacag ggtgacatta aaaaaattaa aaaattaaag aggaaggaag gaagcaacgt 240
ctcttctccc caacagataa tgccaggtgc tctgtgcaca aggtgacgtt atccattcat 300
tcctctctca ggtgtgggag tgagggtagg ggagggcatg gcaacgatgg cctttgccag 360
ggacctn 367

<210> 480
<211> 337
<212> DNA
<213> Homo sapiens

<400> 480
acaacaaaac aaaaccaggt gtagtgtggc tctaaaggaa catctgacca ggttcctggg 60
gaaccagggc catgggagga agaagggact cttctcccat gagaagggcc tggagatgca 120
gggactgtca agtcactttg gccaactttt tttgctcccc tagaatgaac tctgcactaa 180
aagtggagaa tcacttctat gagagaaaga catacaaaga aaagatataa ggcaatgcta 240
cagtaagttg ggcatatcta tcaaaattta aaaacatgta tactctttga ggagtcctat 300
tctttcagga attcattttg cccttattaa ctatatc 337

<210> 481
<211> 383
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

<400> 481
ttggnctcgg ttggacagta tgacagaaag ggacacaggt tggagcacag aaagaagaat 60
catagaggtg ccaaaggaac ttagacataa tgatgtcgtt caagccaaca agccaagctg 120
aagtaaatga aaccataccc aacccttacc caccaagcag ttttatggct cctggatttc 180
aacaggctct gggttcaatc aacttagaaa accaagctca tggtgctcag cgtgctcagc 240
cctatggcat cacatctccg ggaatctttg ctagcagtca accgggtcaa ggaaatatat 300
aaatgataaa tccaagtgtg ggaacagcag taatgaactt taaagaagaa gcaaaggcac 360
tatgggtgat ccacatcatg gtt 383

<210> 482
<211> 355
<212> DNA
<213> Homo sapiens

<400> 482
ctcttgcggt gagggaaagc aaggggacca tcccttgcca ccattatctg gtaaatcccc 60
catgtgatgc ctaatgcctt ccatccaggc atctaggcct accccaaatc agcaagtttg 120
aaaggacttt gttgtttata tatacatttg cttcattcag ctatgaagca ccctgtctct 180
taccagacct gcaccctcca ccccactgat ttgcttttgg gttgttaaag ggttgcgata 240
cactgcactt gccagacata cctctaaaat agctgttgac tcttgcctca tccctaaact 300
ctcctgctgg gagacccctc ctattctata tgcgacgctt tcatgtgtgt acccg 355

<210> 483

<211> 350
<212> DNA
<213> Homo sapiens

<400> 483
agttcgaaga ggtagggaga gaatttccat gggaaaaaat tgttggattg tacttcaata 60
caagtaacag gaacttcaag aggacctcta agaaaattat atgtaccact tggagtgtag 120
gaacatatgg actggatctg agacccagta agaacagtaa gggtaaagtc tatggctgtg 180
accacagcac tgtgtctggt cacaaaataa ggaagcctgc agtgggagca aacttcacct 240
tcattgataa cgagcaaagg aagctcaggt caaagggagc caccatgggg ctgccttaaa 300
agggatccta cccaagaggt taagtgctct agcagaacaa tgggacccta 350

<210> 484
<211> 376
<212> DNA
<213> Homo sapiens

<400> 484
cgttgctgtc ggtggcgctc tttatatctt ggttaccttа tctttctgtg gaagagattt 60
gatgtctagg tttgtcacat catgcctgtt tcctatcact accaacaggg ttgttatcta 120
gcaaccccga ttgaatacgt ggacgtcgcg gcttggcctc acagactgtg cgaggatagg 180
gtacttgggg tgcgcctttg caaattcgta tttataacta gagtacttgc atttccttag 240
agtacctgac ttgcccagag agaattagcc tttaatttta atttgtatga cagaggattg 300
gaaaccttag tcccagtacg tttagcaaca ttccaaatag cttacaattt ctgctacatg 360
ccagtgcagt tataag 376

<210> 485
<211> 375
<212> DNA
<213> Homo sapiens

<400> 485
tctacggttg cgacaaaacg acagaagggg cattttgatg tctagaatca ggggatccag 60
gatcatcacc aaggtcattt tcctagacag atgtgctgag gctgtagaaa gtgcttttta 120
tttggatggg agcttgtgca taaatgcgag aggggctgcc catctgacgg actagaggag 180
actcatggct gaaccggaac aggacatcgg ggagaagcca gcagagcttg tgtttaaagt 240
cataattcag aaccccaaag aaaatgactt cattgaaatt gagctgaaga gacaagaact 300
gagttaccaa aacctactaa acgagagttg ctgtgaactg gggattaaac cacaacgagt 360
ggagaatatc acact 375

<210> 486
<211> 343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(343)
<223> n = A,T,C or G

<400> 486
actatcgaaa cagatcaaac gcatagagaa agaatacaac ctttcaaatt atttatatga 60
acacagtata atatggatgc ccaaattcaa tgaaatagcg cttctctcta caaccaccta 120
gggctagtac ttgagaaaac tgatactgcc gcacaacctt caatactatc acaacatatt 180
tcttagacct atacccatat gtttatctaa atcacatgga aaaataactg tgcacaaata 240
gagaattctt atgaaagaat ttaatgaaga gggagtgaag aatggtctat tataagccta 300
ctgcaactaa aagattgatg ctctgctgca ctaaaagatg agn 343

<210> 487
<211> 358
<212> DNA
<213> Homo sapiens

<400> 487
atactctctt atatgctaga gatagaccac agctaatgag ctctccctag aacaggtatt 60
ctgtcactca ctcacacaca cacacacaca cacacacaca cacacacaca cctttttta 120
cactgagaga atgagaaaaa cattaactct tagctctccg gtggccatat tttcttaaag 180
gaggaaatca ttacacagta aagcattaat ggccagtgtg tgcttaattt aacaacacta 240
caaattcatg tagagatgtc tgattctcta gagaggaaac tgtcattcct tagctgcagt 300
cccctcttca actgaagaaa tacatttcac cactaggggt ccacagggga acaaagga 358

<210> 488
<211> 353
<212> DNA
<213> Homo sapiens

<400> 488
aagttagttt tgcagctctc cagcatatag aagagcagtt ctatattctg atttctttca 60
ttatagtgca ctgacttcca ctggttatgt gggtaagaag ggtctctgac aatttataaa 120
acaagatggg gaaaggagac cagcaaagca tgtatataaa acatttgttg ctttttaat 180
caaggagacc agaaactgtg gtagtgcccc aacgctttga ttgaaggccg ctgtatattg 240
agtgtattcc tcatgacata ttcggactga ttcagacttt ccacagtgct tattagctca 300
ttctgtgcct caattcttct gagcacattg tcccattaag agtagtcaaa agg 353

<210> 489
<211> 353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(353)
<223> n = A,T,C or G

<400> 489
cgggggtgga gcttcaggta tgaatttttc tttctctttt tttagtgggc acagctatga 60
tatcagaagg taggcctgga accaagctga tgggagaggg aagacctgaa ctggtcagta 120
taagaaggaa atgatatatg aacaggaatg aaatggggcg cgagtggtca tatagcaaag 180
aaggaagtgt gggcagtgag tgcctgatgg ctgcggagtt tctgtttcaa acgataaaaa 240
aaaattttag aaatggacac aacattggcc gggcacggtg gctcacacct gtaatcccag 300
cactttggga ggctgaggcg ggtggatcac ctgaggtcag gggttcgaga ccn 353

<210> 490
<211> 343
<212> DNA
<213> Homo sapiens

<400> 490
tactgctttg tgaggaatgt aaaaaagact aacggaaata atgcaatgat ttacaacgta 60
tgaatgatgc ttaaaatgta gtactaataa aagataataa ttattatgca ctatgattac 120
tgtgcaagtt ttaagaatga aaactctccc taacacttgg aagtgagcac actaccattg 180
tccaatgtga aaattacaga acagctccca cacactatag ggaagatctt tctatcatca 240
ggacagagac aaacctagct gctccttcta agaactctat tcatatactt atacacagac 300
caccattaat acaccatgag ttctgtcaag gaatcttatt tat 343

<210> 491
<211> 360
<212> DNA
<213> Homo sapiens

<400> 491
ttcactgtct cctcactccc aactgtgggc agccaggtgt gcttctacat tgcaggtctg 60
gccccacatc ccctgctgca gacctccact ggcgcccccg tgaccctcag gatctgttcc 120
cagctctgga acaggctctc cggacccctg gccactggca ccctgggcag cttacctcgt 180
cccactcctg atagcccccc aatgaccact ttatgcttca gccaaatcta gctgttgaca 240
gctcctcaaa cgcttgggct ggctaagcct ctacagtttc catgactctc ttctgagccg 300
gaaacacctg cctcctccct acgtgcattc attcccaccc ccgaaacggg acaaactcct 360

<210> 492
<211> 305
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(305)
<223> n = A,T,C or G

<400> 492
agtcataagc atcttttcaa cacttgactg tttcctgtga aatgtattta ccctcataat 60
agttctagta aacagaccct gcgatttggg tggcttgagc ccatcctggc tcttcagcca 120
agatgacaaa tttataaatc cattctaatc acatcatcat ttagcaaatg ctttatttct 180
ggatccaaat ttacatgtct acctgaatct aagattttat gcttatcacg gctatggaga 240
gaacatctct tcctattttg tgagcagggg atactagaac aataaagcgc tcgctcatga 300
cccan 305

<210> 493
<211> 356
<212> DNA
<213> Homo sapiens

<400> 493
ctcaggagaa ggttagaatt cactataaca aaagtaatag ggttattaat atgactagta 60
ttctaagact ctcttaatag gtgggagcag gtagctcagt ttacgggtag acatttatgg 120
gtaagtaaca acattggtga agtgcaaaca cctctctcct agcacacaca acacacacat 180
acgtacattc tttttctttc acacagacac aaacacactc ccatggacaa agaaatgcta 240
cgaagaattt ccttctctca aatatgctgg atgactctgt taggttttcc cacatagaat 300
ggagacttga gtgtttagtc tgggccccac gcatgcagat aagcaccaag ttggat 356

<210> 494
<211> 351
<212> DNA
<213> Homo sapiens

<400> 494
gacacaggtt ggagcagaga aagaggaaac atagaggtgc caaaggaaca aagacataat 60
gatgtcatcc aagccaacaa gccatgctga agtaaatgaa accataccca acccttaccc 120
accaagcagc tttatggctc ctggatttca acagcctctg ggttcaatca acttagaaaa 180
ccaagctcag ggtgctcagc gtgctcagcc ctatggcatc acatctccgg gaatctttgc 240
tagcagtcaa ccgggtcaag gaaatatata aatgataaat ccaagtgtgg gaacagcagt 300
aatgaacttt aaagaagaag caaaggcact aggggtgatc cagatcatgg t 351

<210> 495
<211> 292
<212> DNA
<213> Homo sapiens

<400> 495
ccatagttaa attatctaac tatgttataa acattgggaa taactatgtt ataaacactg 60
ggaattacag agaaatatta tggaaaggtc tgattctaaa aatgcttata attgcttgga 120
gaaacttggt cgtgaatacc aagacaataa aagtcaaaca aaatccttaa tttagtttac 180
tgcagttgtt catgtggcac tggtccctat ggaagcccaa aaaaagtatc cgtattataa 240
gtaaagctgt gccaaaacat gttaaagact tatatttctt tatacttata ga 292

<210> 496
<211> 346
<212> DNA
<213> Homo sapiens

<400> 496
gaatatggag attggcagtg gcagcgagag gttttggggt acagctccgc acactgatta 60
ttgagtcagc agttaatgga atctgccaac acaaaactga aatgagattc catgtaaagc 120
ctacacaata gaaaaatgaa tgtttaatga gcatgaattg tatcatacca tgctgtttct 180
aaaagtctcc aagcttagag gaaccttaga gaggatctta atgagctata ataatagctt 240
ccattcgcaa actggtatgt ataagtctaa catgtccaca ttagatcgct gctccctcca 300
acaaacatgg ggaggcttag cagtttccnc tcactctact aactgc 346

<210> 497
<211> 347
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(347)
<223> n = A,T,C or G

<400> 497
cgggcttact tctcacgatg tcaaagttca tcatacagtc acacagagct gcaagggagt 60
ctaggaaaaa cagtctcaaa aagtagaggt ggacagcttc tcagggatct cccaagctct 120
gatgactctc tcaactctgc ttctctctgg gttccagact agattctctc agaaaaagtc 180
ttggaatata ggatggaaaa aaaaatccag ctgctgcacc tatagattca cagtctgagc 240
ttctcccacc accctctcag tctttgctga tcaaattcag gagaaggtta actagcctgt 300
cttgaaccgt atgtctatct ctgggataat ctctgcacct gagaaan 347

<210> 498
<211> 368
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(368)
<223> n = A,T,C or G

<400> 498
ctctcagcct cgtgctatac accattaaaa caacaaatga ctggctggaa atagaggctt 60
tcacagaaca gatcctgagc ctgtgacctt ccacatccag ctgcccatta tcctttggtt 120

cacggaaaca gccctgacaa gctcagcatg gctacagagg cctcctaaag agagggtgga 180
gcgaaacctg ggccctctga tatatgcacc tgtggacgga gactcttctc tgtcctctat 240
cccttgtcag atgccagggt attagatatg gctatccttt ccccacacct ctttaccatc 300
tgggaagccc cttgggattc actgagtgaa tagcaatgga agtttgtaca ctangccgat 360
agcactgn 368

<210> 499
<211> 288
<212> DNA
<213> Homo sapiens

<400> 499
ctatgatcca ggtaagagtt gggggaactg cagagtgacc cgagctaggc cagtgacttt 60
ggagttagtt tctttacctc tttgggcatt agtggcctcc tctggggctg gacttagagt 120
cttgggagtc ttttagtgcc tactttgtct tatttctgag ccaaagtgat ttggataata 180
cacagtactt aaagaactga agccaagcca gcttccagtc cctgggccca gtatatgtgg 240
gaaaccggta cctactgagt ccccatggga tgacacaggt actgccct 288

<210> 500
<211> 393
<212> DNA
<213> Homo sapiens

<400> 500
cgttgctgtc gaacacaatt agccactttt tcagctacac ttctcactca gctgcaccct 60
acacttctca ctcaggtgca ccccctttg ctgtcctttc cccaacgtac tgggtcccga 120
gcgtggtggg tatttgccac actgggtgcc agctcagcag ccccccacct ctctttattc 180
tctccaaagc tggtctttct gactatcatt gtggtagggg gaggacagat gctaaaggtg 240
gaagctgacc tggagaaaga gacacacggg gtgactgtgg caaaggacag ctggaaaaga 300
aactctatca cttcttcatt ggcaaccaca aggcacctga ggccatggca ctcccagagg 360
ctgtgcgcag agccaagcct ctcaaccctct tcg 393

<210> 501
<211> 368
<212> DNA
<213> Homo sapiens

<400> 501
taatattttt aggagataca gggttttgcc atgctgccta agctggtctc aaactcctgg 60
actcaagcaa tccacctgcc ccagcctccc aaagtgctgg ggttacaggc atgagccact 120
gagcccggcc ttaagacatt tttcttacga ggtatttttt agcccttagg gaaatttatc 180
atgaaagcaa tagagttcag agcaagaact ctggaatcag agctcatatt tgattctgga 240
taaaacctga agagttatat aaccttggag aagctaactg ccattttgaa ccatagtttc 300
ctcacgtggg aaaagggttt catgttaata tatataactc atggattata atgaagacta 360
catgacaa 368

<210> 502
<211> 387
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(387)
<223> n = A,T,C or G

<400> 502

cgttgctgtc gcaggtgggc atgaacgttt gtaaacacac cagcactgat gcctccacat 60
gggtggccct ggagaatgcc ccaacagagg tcaggacagc tggggacgcc gtctcagccc 120
tggtggccag caccgcctta cgtcaggagg ctgcagtgcc aaggacagca agctatctaa 180
acccccagtg tgtgcctcgg ggagctanca nntataangc accattaaat aaattggttg 240
tgcctggaaa tgcaaggagg gcaatagctt tgtaaattgg gttacatttt tctccttgaa 300
tttttctatg gtcctagagc tttccaatca tttaatggca ttgtcggata tcttttacat 360
ttcaattggc atccatgaaa ttacatg 387

<210> 503
<211> 354
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(354)
<223> n = A,T,C or G

<400> 503
ttgcccaggc tgagagtgca gtgatgtgat actggcttac tgcancctct gcctcctggg 60
ctcaagagat tctcctgccc cagcctcctg agtagctggg attataggtg tacaccacca 120
cgcatggctg ctttttgga atgaaaaaaa agatggccat aaacatagcc tgtaggtcct 180
tccacttctc gtaacccaac ctcctgaacc cctagcatta aagtgggtct tcagaaaaaa 240
gggcagccat tggggaccct cagaaaaaaa gggattttcc cttttctttt attaacaaga 300
ggccggtccc cttggagaag agcaggttcg ccttcgaggg ccgcgatatc gccg 354

<210> 504
<211> 350
<212> DNA
<213> Homo sapiens

<400> 504
cagttactca caaaagacca cgtaccaaaa taattgcggc cttttccatt aaatacaata 60
ccctataaaa ctggaagaca aactgggctt gtgatttcca gcccaaagaa ataagatagc 120
cagatgcttc tggcctgtat agcttatgga ttaacacatg cgatgtcaag atattcaccc 180
agactttgaa caccattaaa aataacatcc tttttttgta acttgaaagg cacagatgta 240
cggagcctct gctttgcccc cactacctga cttattgtaa acgcctttct tacataaaca 300
tgcatcactt aacatcagag atacattctt tgagaaatgt gaagccaggc 350

<210> 505
<211> 346
<212> DNA
<213> Homo sapiens

<400> 505
gaagtggagg tggcggggag cctagattgt gcctttgcac tccagccagg gtgttaagag 60
tgaaactcca cctcacaaaa aaaaaaaaaa aaagcccctt tctaaaaaac gccctggaac 120
ttaaggattt ttacccgaaa gcctttggtc ttttacccac ccactaaggg tcttttcaat 180
acccccctgga aacccttggg cttctgggaa actggatggg aaacacatgt ttggggaacc 240
ttgccccaaa agcaatattt ctcccaaaag ttcggggtgg ccaaggactt tcctttgcag 300
aaaattaatt tgttatttta taaaagggcc cccggtggac cttgtt 346

<210> 506
<211> 382
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(382)
<223> n = A,T,C or G

<400> 506
cgttgctgtc gggagatgct ggtcattctg gagaagctgc ggaaagtaac aggcaacgag 60
atgctgggcc tcgaggaggg ggaccttgaa gacgacttcg accctgccca gcacgaccag 120
ctcatgcaca agagctttgg ggacgagttc tacggggccg cggaggagga gaagccacaa 180
tttgaggaag aagaagggct tgaagacgac tggaactggg acacgtggga cgggcctgag 240
caggagggat actggagcca gcaggagctg cactgtgagg accccaactt ctacatggac 300
gccgactacg accccagcca gccgaggaag aaaaagcgcg aggcccccct gacgggcaag 360
aagaaacgca agtcccccct cn 382

<210> 507
<211> 395
<212> DNA
<213> Homo sapiens

<400> 507
gtccgttgct gtcgggctcc tgttgcaata tgaggctgat ctggaagctc tgggggggggg 60
gagattgtcc ctgctgtctt ttccagctat tgggtacagc attttgggca ggagaatcta 120
ggaccatgcc acatcaggtc tctccttaac ccattccatt cgactgttat cacagctatg 180
cttccagagt gctctgcgca ttttcacgat cagcaaacaa tgagcaaatc tctgttctgg 240
aagctgggaa gtccaggatc aaggcactgt catctggaac ctgaggagag acttcttcct 300
gcatccttac atgggggggag acaaaagagt ggcagagaat gaatatactc ccagcccatt 360
cgagagggaa gagccctcac ctcatcactt tcctg 395

<210> 508
<211> 386
<212> DNA
<213> Homo sapiens

<400> 508
cgttgctgtc ggcggcccac attgtccatt attcaactgc acgtgtgtgc tgcgtgcttc 60
acatcctcta ttgagagtta cagcaagtgt taaacgaggt gagttcacat aacaggaatt 120
ctggaactgc ttgaaaacta ggacgattgg gcaatatcgg gcttaactcc acctgatggc 180
aggtgacccg gatagaaaat ggccctgcgt ttagccagga tgtggctctc cagcttggct 240
tcagtgtgat cacttggcag tgcgctttct ctttcgatag tgaaatcctt ctctatacct 300
atgttttgct ttggttctta aggtgggaaa cagaatgggc cacggaggtt gagtgactga 360
agaccaaggg ttggtgcagc ctcctc 386

<210> 509
<211> 356
<212> DNA
<213> Homo sapiens

<400> 509
aaggctgttg tcatgtggca gagagaaagc cccttatgcg cgttaggggc cagaagttgg 60
cgctggtgtt tgtgcacggc tgtgagtaag cgcgtaataa ataaatcaga acgagatgga 120
cggagaccat gcgctgtgct ttcatcctgc tcatccccca gctgaggagg tttctgaccc 180
ccataccccgt cctgcagcct tcgagcaaat gtgtggaaag gaaaataacc catatcgaaa 240
tcagaacaac ggtgttttaa aaatacgaat tgagtctggc caggcgtggt ggctcacgcc 300
tgtaatccca gcactttggg aggccgaggc aggtgggtca cctgaggtca ggagat 356

<210> 510
<211> 352

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(352)
<223> n = A,T,C or G

<400> 510
ctaatagaca tccaaatgca gcctacttgc aagcaggagt taagtcagtt tcactctcgt 60
atcttgtatt tgtgccccca gcccttggag cgtaatgaga aggagccggc ggcagggaga 120
caggaaccac aggactccac tccagctgtg gattctaacc cagacctctt cccccacatc 180
cactaattct tcacagaacc tttaaactgg gtgtgggctc tctgcaagtt tcgctgtggt 240
ttctaagtcc ttagtggttg atccacttga caactaattt ttttaagttg gtagctccct 300
gcggtatttg acagtttttg gtttggtttt gtttttgaga cagggtctca cn 352

<210> 511
<211> 298
<212> DNA
<213> Homo sapiens

<400> 511
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cataatagct tgggcagctt ttgggaagag ctgctacaat ttgggaggga tgtcagtttc 120
acacctccca tcaaaggaag gtgaggaaat ccactagact tacatcctcc aggccaaaag 180
ctagaaagtg tcctttttacc tgcatgcttc caactgcgtg tccctgacgc cctggtttca 240
tggtgctcct gtacctactt taaggagact caccccgctt gctcacgaac gaaagagg 298

<210> 512
<211> 348
<212> DNA
<213> Homo sapiens

<400> 512
tttggtattg ccggtattat tgatggtaaa ctgactaaaa tcatacatgg aataatagaa 60
atcaggccta acatcagata gacttttcca ttcagttaag ttattgtgta gcaaaattta 120
ttttgtcagt tcactacaca atgtgacagt atatagtttc tctaatagag taacattaaa 180
gaggacatat aatataacca aaaatttgag ttccagataa gtttggtgtc tcactagcaa 240
gatgacgtta aataactcat ttaatttttt tgaaaactta attttctgtt ctgtaaaata 300
aaaagcaatc tgtctcttgt ccaaaagact atgtaggttt tttaaaaa 348

<210> 513
<211> 368
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(368)
<223> n = A,T,C or G

<400> 513
acattcatca atgctctgga ccatagcatg gtgaggaaag ggtagagcag ctcagtgccc 60
caaggcccag agcctgccag gccaggatag gagagcatcc catggctgga ggagccctgg 120
ggcagccact gccctctgcc tcccatagct ccagacacaa atcaacaggg ctggcgggcc 180
tcccagtgta tagcctaggg caggataggg gagtcactgg cagccaggct ttctaagcca 240
gagggccctt ggagatcttt cactgttgtt tcccatttac agtcagtgaa actgaggccc 300

agagagggaa agtaactttc ccaaagaaac acagcaactg agtggcacgg ctgggattgt 360
aactcccn 368

<210> 514
<211> 349
<212> DNA
<213> Homo sapiens

<400> 514
cacatacgcg tttctatttt tcttcctctc ctcctgatct ccttaaaaat gaatctagag 60
ttggtggctt tttccccctc ctctttggcc agttccacag ttcagttctt cctgaaaaca 120
gggatgatga acttgtagga tcaggacaaa tgtgtgtttt tcaaaaactt aaggctgggt 180
gtgaaacacc ttctgtggac aaggatttgt aaacttctct cctccctcca gctgcggccc 240
cagcctaact gatagttact tgattcagtg tgctagacac ttaaatagca tctatgtctc 300
tttcaaggga atttgtcaaa taatgcgtgt tagctaattg ttgcaagca 349

<210> 515
<211> 349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(349)
<223> n = A,T,C or G

<400> 515
tccattgcag ggtatcgcca ggtgccttga acttcccgag gcaagaagac cctggagaca 60
ggtagcaggg tggccagggc tggggtggct tcaaaactca cagacaagca gatgcttcaa 120
gtctgggaag cctaagccca ggtggctgca attctgatgt cacctagata agccactgtc 180
aactctgcca tcccttcccc caggctcaga ggctgaggac agagaagctg gggttgtgcc 240
ccagntcttt ctagtaagac tcaaaggaca aagggtgggc ccagggaaca tgggtgaccc 300
tggcctcatc ctcagtgccc attgcttgca gggcaagggc tccagcttg 349

<210> 516
<211> 383
<212> DNA
<213> Homo sapiens

<400> 516
cgttgctgtc gattgagttt aacccatgttc caagagaaaa tacaattaat gaatagtcac 60
aaggttgcta atctgatcaa tgccgggtga taggacattt aatctgattg tctgtgactg 120
caattgcaca gagctttggc agccaagagg accgccctgg ctggcaagag cgtttgtagt 180
ctggtcactc cttggggtgg aggtggggct ggggagctgt gatgtaaaca gatgtgggga 240
ggagagaagg cgcccagagc atgagaggaa ctggctgaaa ggatcgaaca cagggaggtg 300
agcccacaga aagtaggtac ctttcatgcc aggaatggga gagacagccc catttttttt 360
tctgagacag agtctcgaag tgg 383

<210> 517
<211> 361
<212> DNA
<213> Homo sapiens

<400> 517
cctaattccc tcacaagcat tcagtccctc caccctgagg tggtgaaatc cctgcaggca 60
tttataagta tacctggaca gaagaaatac aagataccgt tctattaact caatatagtg 120
ttgctaagtt cgtacttttg ctttggttat tttattttat aaataggtat cactcgcatg 180

gttccaaatg cggtaggcac agagagtata tatgatggaa ttacatgctc cttccctgca 240
ctcagcaacc gagatattcc cgctacgggc actcaaaggt ttcattgtct gaaatatcag 300
gctaaacgta gttcatggtt aggaagcaac aaccgtaaat aatccccatc caaacggagg 360
g 361

<210> 518
<211> 365
<212> DNA
<213> Homo sapiens

<400> 518
gggtgaagca agtaaggagc ataccttagt cacagcccgg cccttggtga atgggtgtac 60
tataaactaa atctgcctgc caatcatggg acaaggcaga acacttgtct atctctgtct 120
aagctccccc gaaaatttat gaagagatgt ccgctcgcac atgagtttga gactaaaact 180
tatgtttcct aagtaaaacc cacatcagga aaaccctagt ccagtaaaat ccaataacaa 240
gaacttctct tatgttggta aaatccgtgg ttgcttgaga gaaacaagag agaaataaat 300
tatctctaga gaatttacca aagaaaatga accttaatcc ttgtctcata agatttctat 360
agaaa 365

<210> 519
<211> 396
<212> DNA
<213> Homo sapiens

<400> 519
ggcacgagcg gcagcagcgc atttggcttt tccacctgct ggtgccctgg aggctctgag 60
ccccggcggc gcccgggccc acgcggaacg acggggcgag atgcgagcca cccctctggc 120
tgctcctgcg ggttccctgt ccaggaagaa gcggatggag ttggatgaca acttagatac 180
cgagcgttcc gtccagaaac gagctcgaag tgggccccag cccagactgc ccccctgcct 240
gttgcccctg agcccaccta ctgctccaga tcgtgcaact gctgtggcca ctgcctcccg 300
tcttgggccc tatgtcctcc tggagcccga ggagggcggg cggtcctacc aggccctgca 360
ctgccctaca ggcacttgag atacctgcaa ggtgtg 396

<210> 520
<211> 354
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(354)
<223> n = A,T,C or G

<400> 520
cagcaggaga tctgtccctg cttcaatcca cgagaagcct cacaagtgtc tggagggaga 60
aacgtccttg aggacagtag gaaactactg tcctcagccc tggaaactgt gctaggtaac 120
tcagacaaat caagtggccg ttcagcagca tcacactgca ggaagtatgt tccacaggtc 180
ccttgggcac aaacccccag ccaaccctcc cacactgctg ggaaatcccc cttaggactt 240
tccctattta ggacagggca gtgctctgat gatttactag agccaaggcc aacctgggtt 300
atagcaccac ctattgccga aaagaaggca gcaacctagg agaaaaattt anan 354

<210> 521
<211> 265
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(265)
<223> n = A,T,C or G

<400> 521
cgatatctgg aagggcaggg acatgagccg ggtgggggcc aagtaggacc tccatcagtg 60
gggatatgac tcagctgtga gaagggacag atggagtgca ggtccagcca ggggctgcag 120
tggggctggg gtccttagag ctcagtatga gcttcagcac gaggtgggcc ttgtgtgtgc 180
acgtangtcc ttcccggaag gcatctccag agtaaaggtc atggtcagga atagttcatg 240
attggagact gaaactgcac atagg 265

<210> 522
<211> 378
<212> DNA
<213> Homo sapiens

<400> 522
cgttgctgtc gcaccctgat ggagacagag ggggacagcc cccacccatc tgtccccggc 60
agggctcttg ctctcacagc cccctggaac aagccccatg ccccaacctt gggcctggct 120
actggcccag aaggcaccag gcctcatgag aatgctgggg gaccccaaag tggggggtcc 180
cataacctga cctcctgggg ctacacctca tgcctggaca agacgctgtg ggctgtccgg 240
gccttgaaca gccctgcagc tgcacccccg atcctgatac ctcaccccat tcactgccag 300
catgctaagg ctactggcgg gcatcctctc tgctcaaaat tatagacctg tctccctgac 360
acacctgctg tgccctct 378

<210> 523
<211> 344
<212> DNA
<213> Homo sapiens

<400> 523
tgaggtgccc tgccaggacc ctgccagctc ttgttggaca gggaccgcct ctctcctgcc 60
cattgacccc agggccagat gtgggacaga ggaatgtgca tggtgggggc ctgggcttct 120
ccgtgtgtgt cctgtctcct tccagcttct tagacgtggt ggcccagagt gcttttcagt 180
gcacccgagc catgatgagc gagtggctgt gatgacccac gcagccagtc ctttgtgcaa 240
ggaggggaag ggagggccct acccgtattc aagctcagct gtcggcactg tggtttcttg 300
caccctctta aacctgagac tccccctctg attgcagttg aacg 344

<210> 524
<211> 348
<212> DNA
<213> Homo sapiens

<400> 524
ttcattcgct cgccaccaca gaaatccaga aacgaatata tagcaccaga atttttcacc 60
agcaacaacc cagaactcaa atatgggatg aaacaattcc tggagccaca aaaaagtgga 120
gaaactccaa gcagatagga aaagaatcca gactcccaca tccacaatgc ccctcccca 180
aattcttccc agcgccaagc acacaggaaa tcttccctca attcacagtt tatgtacttg 240
aaaaagagag attgagatgg tcaaccggct tccccacctt cttgggttcc cagcaggaga 300
cttgtccttg ctttaaccca caggaatcat catgactgag tgaaggaa 348

<210> 525
<211> 378
<212> DNA
<213> Homo sapiens

<400> 525

cgttgctgtc gggaagaaga gccaaccaat cacaccagag cttccaccga cagcagaggg 60
gacgtaacac accttctttc ccctccggct ttccttcccc ttctctcccg ccttctcctt 120
attcatacca gaagcgcctc agctctgatt ggctggagct ctgtgctatc tcagccaatc 180
acaagccggg ctgtgctcct acaccatccg aagagcgaat cgtgcagaga ccgtgtctac 240
gattggcctc tccctgacaa ggatttaatt ttgaattttt ctttatggcg tgggagaggc 300
cacagcccgg actccatcga ctcccccggc tcttagacta aaatcatgcc caagttcaaa 360
caacgaagac gaaagcta 378

<210> 526
<211> 349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(349)
<223> n = A,T,C or G

<400> 526
acacccagaa aagcccgttc caagctcggg aagttgcaga ggagaaaacc tggagtctag 60
cgtcctggct ctgcctggtg atgggccagc ggcccgtgcc cagagaaacc cactggagga 120
ggatggaggg cggccctgcc cccgggacag accagccttg accggagcga aggagggagt 180
gcgccacgca aagcaccaca ggcggcgcgg gggccttccc tggaaggcca ggctcctttc 240
caactgggct gcctctcggc ttcaacgtcc taaagcgggg acggctgaac cccggncatg 300
gctgacttga ctccacctcg gaatacttga tagggttcgc ctatcgctc 349

<210> 527
<211> 394
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(394)
<223> n = A,T,C or G

<400> 527
cgttgctgtc gccagagttg cgaggagttt tttaactgat ttagccaggt ggcaatcatg 60
agtgaatgga tgaagaaagg ccccttagaa tggcaagatt acatttacaa agaggtccga 120
gtgacagcca gtgagaagaa tgagtataaa ggatgggttt taactacaga cccagtctct 180
gccaatattg tccttgtgaa cttccttgaa gatggcagca tgtctgtgac cggaattatg 240
ggacatgctg tgcagactgt tgaaactatg aatgaagggg accatagagt gagggagaag 300
ctgatgcatt tgttcacgtc tggagactgc gaagcataca gcccatagga tctggaagag 360
agaaagaaca gcctaaagaa atggcttgag aaan 394

<210> 528
<211> 282
<212> DNA
<213> Homo sapiens

<400> 528
ctcccttca catctggcca gctgccatgg ggcctagctc aaagaagggg ccccctccca 60
gggccagctt caggatctga tcctgccccc cagctctacc ccacaccata ctatgctggc 120
ctcgctgagt cacatgtgca ggtgcccctc ccctcaaaca cctgtgacct cccagcctca 180
taccaagtct ttggctcttc tgagacccct agcacctgtt gacgcaactg tgctaatgag 240
ctgggaaagc ttccccaacc ccgtcccaca taaggggggt gg 282

<210> 529
<211> 396
<212> DNA
<213> Homo sapiens

<400> 529
cgttgctgtc ggtgcggcgt ctgatttctt tgtgctaacc tggcagctgt ggggccctta 60
ggagcccccc accgagggtg gacacagtcc ctttccttcc tgcagatgcc taggcaggag 120
gagggcttcc tgcctgtttg gcaaagtccc aggcagaggc caaggatgag gcctgactcg 180
gctcctccct ccacatcagc cagggcatca gaagttgggc cagggcgggg ccttccctgc 240
tcgattttgg acgaggccta agtaaacccc ctatgccctg ccccagacct ggctctttcc 300
taacccccтc aacggtggga ggaactggca aaaggtgcgc ctgggcacaa acttcccgga 360
tctaaaggcc cctttcagat tttgaccaaa ggggcg 396

<210> 530
<211> 389
<212> DNA
<213> Homo sapiens

<400> 530
tactacggtt gcgacatgac gacagacggt gacgggtgcg ggcagaccac agctggattg 60
cgctgcgaaa agagctctat ttgggacggc tgcgatgcta ctgctgtatg tgtcgcctgt 120
atgagctcga ctaaacgggt ctggctgcga caatacgcac tgattgtatg ttttgcgttc 180
agacgaagga gggggacggc tttgttgaga attcccacat ctttgggttc agcttggcat 240
taaagagtgt agtgataaat tattgatgtt ttttatggga acggggaggg cccgcacaaa 300
cgtcatgtac ttgctatcct gatctactct agttcttttg tttttcaggt gaggaaacta 360
aaatctactg aacttagtct ataataagc 389

<210> 531
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 531
ggcacgagat gccgagcaac tgtggcctcg aagagaaaat tgccaacctg ggcagctgca 60
atgactctaa actggagttc aggagtttct gggagctgat tggagaagcg gccaagagtg 120
tgaagctgga gaggcctgtc cgggggcact gagaactccc tctggaattc ttgggggtg 180
ttggggagag actgtgggcc tggagataaa acttgtctcc tctaccacca ccctgtaccc 240
tagcctgcac ctgtcctcat ctctgcaaag ttcagcttcc ttccccaggt ctctgtgcac 300
tctgtcttgg atgctctggg gagctcatgg gtggaggagt ctccaccaca gggaggctca 360
ggggactggt tgggccaggg atgan 385

<210> 532
<211> 392
<212> DNA
<213> Homo sapiens

<400> 532
ggcacgaggg tgtgtctgtg tttgagatga ggctgtcgtc tttcaaaggg tgtgtccatg 60
gctgttatcc atgtagctat gtctctgtgt gaaggtgtgg ctattgtctg tgatgacatt 120
gcctcggaga gtgcatctga gggatctaca agactgtctg tgtccaagag tgcagctgtt 180
ggcggtgagc ctgtgtgact gtggctgttg ccttagagtg tgggtgtgtg ggtattgcac 240

agagggtgta tctgtgtgca gtggtgcatc cgttagggtg tgtgggaaca tgacgttgtc 300
tttgagagtg gtttcatgag ggttatttgt aagggtgtga ctgttgcctg agagagtgct 360
cgggtggtct ttgcgaaact cggtgcctgt tg 392

<210> 533
<211> 381
<212> DNA
<213> Homo sapiens

<400> 533
ggcacgaggc ccccttcagg ctaagtttca tgcagggaca gacccagaaa gaacacagtc 60
tgccctcaga gagctctttg cagtgtagtg acactggggt ttctgcagtc agggaggagg 120
gagggtggcc aggctgacag ctttttgcaa gaggaggggg accagcacca gctgggaggc 180
ataggctagg acaggcccac gtggaggctg ggcaggaagg gcctgctgag gtcacacagc 240
tgttggtggt tgggccaggg cggcttcctc ctttcagaat gctagggtgg ctctcaccac 300
tggccgcctc tccttgccag gcctgccaac tcaggggaca gatggagcac gagtggagaa 360
agggaaaggc aggtctggtg t 381

<210> 534
<211> 387
<212> DNA
<213> Homo sapiens

<400> 534
cgttgctgtc ggacatcgca aacgtcgcag gacttccagc aagtcggagg caggggctag 60
gggtggaggc cagggttcca aggaaaaggg ccgagggagt tggggaggcc gccaccacca 120
ccaccaccca ctgcctgcag caggcttcaa aaagcaacag cgcaagttcc agtatgggaa 180
ttattgcaaa tactatgggt accgcaatcc ttcctgtgag gatgggcgcc ttcgggtgtt 240
gaagcctgag tggtttcggg gccgggacgt cctagatctg ggctgcaatg tgggccatct 300
gaccctgagc attgcctgca agtggggccc gtcccgcatg gtgggcctgg atatcgattc 360
ccggctcatc cattctgccc gccaaaa 387

<210> 535
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(386)
<223> n = A,T,C or G

<400> 535
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actacgtgga agccatcgag ggtgtcagaa cgcacctgct gcggcactcc gagcccagta 120
agctcacctt tgtgggggag cttgcccacg gccgcttcag tgccaagatg gaccacctgg 180
tgtgcttcct gccagggacg ctggctctgg gcgtctacca cggcctgccc gccagccaca 240
tggagctggc ccaggagctc atggagactt gttaccagat gaaccggcag atggagacgg 300
ggctgagtcc cgagatcgtg cacttcaacc tttaccccca gccgggccgt cgggacgtgg 360
aggtcaagcc agcagacagg cacaan 386

<210> 536
<211> 364
<212> DNA
<213> Homo sapiens

<400> 536

aataaaagtt tctttaaggc agataaagct acaatgctgt ggaataaaaa agctactgct 60
gtgttggtaa tagctagcac agatgttgac aagacaggag cttcctacta tggagaacaa 120
actctacact acattgcaac aaatggagaa agtgctgtag tgcaattacc aaaaaatggc 180
cccatttatg atgtagtttg gaattctagt tctactgagt tttgtgctgt atatggtttt 240
atgcctgcca aagcgacaat tttcaactcg aaatgtgatc ctgtatttga ctttggaacc 300
tggcctcgta atgcagccta ctatagcccc catggacata tattagcatt agctggattt 360
ggaa 364

<210> 537
<211> 389
<212> DNA
<213> Homo sapiens

<400> 537
ggcacgagca gcaacaagtt catgctggtt ctggccagca accaaccaga gcagttcgac 60
tgggccatca atgaccgcat caatgagatg gtccacttcg acctgccagg gcaggaggaa 120
cgggagcgcc tggtgagaat gtattttgac aagtatgttc ttaagccggc cacagaagga 180
aagcagcgcc tgaagctggc ccagtttgac tacagggagg aagtgctcgg aggtcgctcg 240
gctgacggag ggcatgtcgg gccgggagat cgctcagctg gccgtgtcct ggcaggccac 300
ggcgtatgcc tccgaggacg gggtcctgac cgaagccatg atggacaccc gcgtgcaaga 360
tgctgtcccg cagccccagc agaagatgg 389

<210> 538
<211> 393
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(393)
<223> n = A,T,C or G

<400> 538
cgttgctgtc ggatagtgat gggggtgacg gtggaagcag gtcaggtgaa acaggggaca 60
cccatgtgtg tcccaagcaa aaattttgtt gacatcggaa tagtaacaag tattgaaata 120
aaccataaac aagtggatgt tgcaaaaaaa ggacaagaag tttgtgtaaa aatagaacct 180
atccctggtg agtcacccaa aatgtttgga agacattttg aagctacaga tattcttgtt 240
agtaagatca gccggcagtc cattgatgca ctcaaagact ggttcagaga tgaaatgcag 300
aagagtgact ggcagcttat tgtggagctg aagaaagtat ttgaaatcat ctaatttttt 360
cacatggagc aggaactgga gtaaatgcaa tan 393

<210> 539
<211> 395
<212> DNA
<213> Homo sapiens

<400> 539
tgggacctca gggccacact gaacgccttc ctgtaccgca cgggccagca cagcaacaag 60
ttcatgctgg tcctggccag caaccaacca gagcagttcg actgggccat caatgaccgc 120
atcaatgaga tggtccactt cgacctgcca gggcaggagg aacgggagcg cctggtgaga 180
atgtattttg acaagtatgt tcttaagccg gccacagaag gaaagcagcg cctgaagctg 240
gcccagtttg actacgggag gaagtgctcg gaggtcgctc ggctgacgga gggcatgtcg 300
ggccgggaga tcgctcagct ggccgtgtcc tggcaggcca cggcgtatgc ctccgaggac 360
ggggtcctga ccgaggccat gatggacacc cgcgg 395

<210> 540
<211> 396

<212> DNA
<213> Homo sapiens

<400> 540
ggcacgaggg acctcagggc cacactgaac gccttcctgt accgcacggg ccagcacagc 60
aacaagttca tgctggtcct ggccagcaac caaccagagc agttcgactg ggccatcaat 120
gaccgcatca atgagatggt ccacttcgac ctgccagggc aggaggaacg ggagcgcctg 180
gtgagaatgt attttgacaa gtatgttcct aagccggcca cagaaggaaa gcagcgcctg 240
aagctggccc agtttgacta cgggaggaag tgctcggagg tcgctcggct gacggagggc 300
atgtcgggcc gggagatcgc tcagctgggc gtgtcctggc aggccacggc gtatgcctcc 360
gaggacgggg tcctgaccga ggccatgagg gacacc 396

<210> 541
<211> 319
<212> DNA
<213> Homo sapiens

<400> 541
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aaaaataagt taatgttttt tgaatgcctg ctactggggc caagggttag acgtagctca 120
tctcagtgtc ctctaccacc ttacagggag agaataccgt ttgcaaatag gggcccaaaa 180
agatcactgt gctggcccaa agtcacacag ctgataagtg gcagggcaga ggcctcattg 240
tgcctcccag tacaaagata gcagtctctt cctgcattac agaattgtga gaatgagaag 300
ataatgaacc agaaagcac 319

<210> 542
<211> 301
<212> DNA
<213> Homo sapiens

<400> 542
atgcctggct aatttttttat ttttagtaga gatggggttt caccatgttg gccaggctgg 60
tctcgaactc ctgacctcaa gtgatctgcc cacccagcc tcccaaactg ctgagatcac 120
aggtgtgagc catcgtgcct ggcctgttta atgaatttct gactggaggc ttaatttttt 180
tgttttttc acagggtctc tttgagagga tgacagtggg aagcgcctac tgtggctgtt 240
gcggctgcag gcctggctcc ttccactctc gggctgccct tcacggtgcc aggtttgtgg 300
g 301

<210> 543
<211> 340
<212> DNA
<213> Homo sapiens

<400> 543
tatttttgcg tggaatataa taatatctga aacctccaca ggtcctttat acataacatt 60
ctacctacaa ataagagtca ctacacatgt gaagcagcaa tgtcatatga ccaataatca 120
agaggggaaa aaaaaagcaa aacaagcaaa tagatgatct gcataattga agttaacaga 180
caagaacttt aaaacaacca taattgggac ttctggatag ctaagggcat aacagctgca 240
ccatttagct atatgcctcc ctgtatttcc tccctaaaga attaaaacca acaaaaaatg 300
gtatgtaaat ctagacgaaa ccatgccttc ggcataactt 340

<210> 544
<211> 328
<212> DNA
<213> Homo sapiens

<400> 544

ggaaaaaaaa gcaaaacaag caaatagatg atctgcataa ttgaagttaa cagacaagaa 60
ctttaaaaca accataattg ggacttctgg atagctaagg gcataacagc tgcaccattt 120
agctatatgc ctccctgtat ttcctcccta aagaattaaa accaacaaaa aatggtatgt 180
aaatctagac gaaaccatgc cttcggcata acttgaagac agagaatgct aaaatattaa 240
aatgaccgtg actaggctgg gcacagtggc tcacacctgt aatcccagca ctttgggagg 300
ctgaggcagg tggatcactt gaggccag 328

<210> 545
<211> 324
<212> DNA
<213> Homo sapiens

<400> 545
aaggcagcag gtgccagtgt cagtaaaggc cctgcctggc tcccttgctg agaatccagg 60
ctatgcctga gctagggtgt gcacgtgtgt gtgactgtgt gtgtgtattg caaaacaaag 120
tttcttgggt ttagctagat ttcattttac cttctgagtg agcttgtatt ttccatggaa 180
aatggacaat tctttctttt ccataggtca ggaagctgtt cctgcattct ttgggaccag 240
aaaaataatt ttcatttatc ttctgtcatt atctgactct ttcctcctaa atctcattta 300
cactgatgta aatgtaatat ttta 324

<210> 546
<211> 333
<212> DNA
<213> Homo sapiens

<400> 546
tcattacatt attttccttg taattaattt gctaaacgga ggtgaacaaa gtagtcctaa 60
actaaaattt atttaccatt tctcctttaa atacaaagac aaatatgatc tattcatgac 120
attataccac tgtttctgtt atttcccata ttaacttggc gtagttgttt aaaacattct 180
tttcttcttt gtagatgaag aaaatatgac agtgaaataa cgattactat tgatcagtca 240
tagttgttta aaataatgtc taatgggctg ggtgcggtgg ttcacacctg taatctcagc 300
actttgggaa gccgaggcgg gaggatcacg agg 333

<210> 547
<211> 341
<212> DNA
<213> Homo sapiens

<400> 547
aacggccagg aatgctcaca aatatagtga cagtaatggt gtcattctga ggccttcgcc 60
tcaaggcagg gcttgaaagg ggataaagtc taatggcact agctggcatt tcaaattcta 120
gatgcctgag gcagactggc accgaaacag ctcctcgttt ctctcaaagt gaacatataa 180
ttcatagagg gttaacaaaa taatatcgtg aagtttttcc cctttaaatc tctaacggtg 240
gcggggcgcg gtggctcacg cctgtaatcc cagcactttg ggaggccgag gggggaagat 300
cccttgaagt caagagtccg agaccagcct gggcaacatc g 341

<210> 548
<211> 332
<212> DNA
<213> Homo sapiens

<400> 548
gtctgatcat atatcctgat ttttaggtaa gaatacatag ccatgacagc aagagaatat 60
ctctgcagct tctgatgtac actgaagagc aaaataactt aagacatgta aagttaggtg 120
cctcaaaaag taaacactgc atgctcccaa ggggaaaaac aattctacaa aacagagagt 180
taaaaaaaga gaaagaggcc gggcacagtg gctcacgcct gtaatcccag cactttggga 240
ggcgaggcag gtggatcaca aggtcaggag attgagacca tcctggctaa cacggtgaaa 300

ctccgtctct actaaaaata caaaaaatta gg 332

<210> 549
<211> 328
<212> DNA
<213> Homo sapiens

<400> 549
ctgtgttgca ggcataaacc caagtggctt ttaaagatca gctgtgatta atagtagtca 60
gttggaagtc agagtcatca gtttaaaatt tagctcaaca aatggtggct tgcttggtag 120
ttcctgtgtt taacattatt tttggaagaa aaagaaaaaa aaggaaggta gaggaaggga 180
gaatgttttg attgttttct aatttattga tctctccctt gcatcatcac caagactgtt 240
aactggttcc cagaatgttg tgggttgagc ttctgtgctg taatgtggtt tgatttttt 300
agaggggaga taagggtatc tcctgtct 328

<210> 550
<211> 319
<212> DNA
<213> Homo sapiens

<400> 550
gagaactaag tattttctct gcattagcca taacacatat tattttaatt aaggtttctg 60
tttttttaat cacctcatgg aaacactgag tctaggctga gatgggggcc tttagtattg 120
gatgaggctc acttatgccc actagccttt atgtaggtat gttttacatt tcttaacatg 180
cactcattta agtgtatgat taaatgactt tcagtaactt tagtgagtgg tacaaccatc 240
actagaaatc agttttagaa cattttatct cttcagtaag atatttgtga ctgtttacag 300
ttaatccctg ttcttacct 319

<210> 551
<211> 332
<212> DNA
<213> Homo sapiens

<400> 551
tctgctatcc tacttgagct tctgtatcca cttgtggtac cacatgcttc acagtgtttt 60
gtcatggttt atttacatga caatcaccag tagaagtttg gaagattttt gaagatagga 120
cactatcatc atcatttga atctctacta tctagtacta acccacaaat aacaagcact 180
tgagaaatgt ttgagtgcct gagtggatca gctttccact tggtaaaact ttaggtaaat 240
ttcatcctgt taaactggtc ctgtgtatta gccgctcact taccaccatt tgtctctctt 300
tcacatcaat tggtgaatag aaaaatggct ct 332

<210> 552
<211> 177
<212> DNA
<213> Homo sapiens

<400> 552
cacttgatgc atatactaaa ttttctttca tcaattttaa gtgcctcaat ttttagtccc 60
tttaattaga aggtagccag tatccagtac caaaaattga gaacactgtt tcctgatcta 120
aagagttcct ttttactgtt catgcttgct ccaaagatat ttttctcata ctgatgg 177

<210> 553
<211> 328
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 553
atgacctgac aatttcatat acaaatacat tgtgaaatgg ttaccacaat caaattcatg 60
aatatatcca tcaccacaca tggttaccat cctttgagtt ttaaggtgaa ttaatggaat 120
gcgtgtcatt catatgcata ttcatatgca tgtcatttgc ataccattcc ttgactcaag 180
aaagttgcta tatgagtgaa agataattat tgatcatatg aacttaagat acaattattc 240
tcatctggcc aggtgcagtg gctcacgcct gtaatcccag cactttggga ggcagaggca 300
ggtagatcac ttgaggtcag aagtttgn 328

<210> 554
<211> 335
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(335)
<223> n = A,T,C or G

<400> 554
cccactgaaa gttattacaa aaaattgtgc agagtaaatc aactaatccc agtgaatcaa 60
ctaatccaag gctgtgatca ttttaataac tctccacaaa ggctcagaaa atttctccac 120
ccatgaattt cttctacaca gctgtgatta taatgtgata caaaagcaac atccttcagc 180
tagtgcagtt gccaggagag agtggcagag ccgcagagtg tggggtagac cctacatttg 240
aatccatcag caagccgtgc tttctgcctc tcaacacagg cacagcaaga gtctttaaag 300
gagaaagaca actgcggngc ctggtaaacc gaaat 335

<210> 555
<211> 329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(329)
<223> n = A,T,C or G

<400> 555
cttagcacaa cacagaaaag ctttaaacac tcttaccttt gactggaatt acacacacac 60
acacacacac atacacacac acacatacac acacacacac taaggctttc ccacaaagcc 120
atgatgcatc cttaaaaata acacacagct ctgaaaagtg aatgtcgggg gtgaagagag 180
cctcctaca ctcctttcc tagagatgac aaggttgtgg gggcatggct gactgtgagg 240
agcaaaaaat gagagggaga tatcatttta cttctttgta ctgcnataat aaaaagaaca 300
gatagaatgg aaggaagagg ccaggggca 329

<210> 556
<211> 229
<212> DNA
<213> Homo sapiens

<400> 556
attttttaa tttaatatgt tacaaaatag ctgtagtatc atatttttaa ttgatggatg 60
gatttatcca catgaacgac atggcataat ctatgcctaa tactctctac ccagctgggc 120
attgttgact attcaatgtt tacgaaatag atcccatccc tacttgactc cagaagtgct 180

attttctaag tacatgttga aaagtataat ttcaatcagt caagaatcc 229

<210> 557
<211> 267
<212> DNA
<213> Homo sapiens

<400> 557
gcccacctac agtcctggca gaattggact tcagcagaac cggggtcctc ccttttgttg 60
gcctgtgggg aaacacttct gatgggcccc tttttgtaag gttgcaagta gtcacatgaa 120
tactatcagc cacactggcc agatcagggg acaatcctat gtcctgggac ttgaaacgtt 180
cttgtccacg tgtggcgctt ggtgactacc atggccaggg accagcaggc cctgtctgcc 240
ttcagcctag agcagggctc tgagccg 267

<210> 558
<211> 338
<212> DNA
<213> Homo sapiens

<400> 558
tccaagtttc cccaaacatc ttacagttca agtgagggta accattgata gactatatat 60
tgtaaaaaga tactagtact tctgaggaaa tttacaattc agcaacacaa cttataaaat 120
accattaaaa tgctgtcttc tattcatact gcgaaaacct atagagctat tttgaaaaaa 180
caaaaaccaa gaaagctctt tatgtcctcg acatagtaag gtctctaaat atatagcaaa 240
tagagaaagg gagatcagta cagtgtgtat attatgacac catttgtaaa acattatctg 300
cgttcatcat tttcttatat atgtataaaa taactcag 338

<210> 559
<211> 325
<212> DNA
<213> Homo sapiens

<400> 559
gagaactaag tatttttctt gcattagcca taacacatat tattttaatt aaggtttctg 60
ttttttttaat cacctcatgg aaacactgag tctaggctga gatgggggct tttagtattg 120
gatgaggctc acttatgccc actagccttt atgtaggtat gttttacatt tcttaacatg 180
cactcattta agtgtatgat taaatgactt tcagtaactt tagtgagtgg tacaaccatc 240
actagaaatc agttttagaa cattttatct cttcagtaag atatttgtga ctgtttacag 300
ttaatccctg ttcttacctt gaggc 325

<210> 560
<211> 336
<212> DNA
<213> Homo sapiens

<400> 560
tcatctttgt aatatctaca tgcccagtac ctaatatata tttattcaat gtgatatttc 60
ttatcaattc atacctgaga attcacttaa ctttgccatc acatgagttc tagcaagcag 120
gaatatacag tgattatgcc tagaatttta aacatcagat ctgacctaag aaataacaat 180
cccaactgta agaaagaagt ggtttgggga agtcaaacac taaagaaata ctttcaaacc 240
agtctaaaac taactaaatg gttaatctta tattaacaaa aacatgcaac ctagattaac 300
aaaagcatac aaatctcaat ttcattatgt gcattt 336

<210> 561
<211> 323
<212> DNA
<213> Homo sapiens

<400> 561
actaaaaata caaaaattag ccggacgcag tggcacgcgc ctgtaatccc agctactcaa 60
gaggctgagg cacgagaatc acttgaaccc gggagggaga ggttgcagtg agccaagatc 120
gtaccaccgc actccagcct gggtgacaga gtgagactct gtctccaaaa aaaaaacttt 180
gcttgtatat tatttttgcc ttacagtgga tcattctagt aggaaaggac aataagattt 240
tttaacaaaa atgtgtcatg ccagcaagag atgttatatt cttttctcat ttcttcccca 300
cccaaaaata agctaccata tag 323

<210> 562
<211> 340
<212> DNA
<213> Homo sapiens

<400> 562
ggaagggtga gattttctac tgcattagtt gaggcaatat tagctataac aaaacagatc 60
aaatagtgta taatgactca ttccaaataa acatttgttt ttcatttatg taactattgc 120
aggttggtag gggactttct cctccttgca gatattttgg aatccacctt tgaagatggg 180
aatacaacat gtgacttata agatttagta aatagggaat acagagggca aatggaaatt 240
cagtaggcaa caaatggtgt ccaatgttat aatcattcat gtgaagtttg gtaaatatcc 300
cactccattg ttttatagtc tgaacacttg attttacata 340

<210> 563
<211> 321
<212> DNA
<213> Homo sapiens

<400> 563
ataaaccatg gtcatttta ggcatgtatc attcatttac tcatagtttg gtttacttaa 60
attatcagga atacaatgtt gcaatgatgc ttaaaaaaca cttgttagtt ttccctgtac 120
caggcaatgg ttataattaa aatgatatgc tgttgagaag ccactcttaa gagtccagtt 180
tgtttaatgt tatgggcagc taccaaattt gggtgtctct tgtatatttt ttgtaagaat 240
ctcatttttt atgcttgaaa gatttggtga aaagaatgtg gttgaccata atttgcaaca 300
ttgtcttatt aaaaataaac t 321

<210> 564
<211> 327
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(327)
<223> n = A,T,C or G

<400> 564
aagcccaaat tttaatgcac ttctgacttt aaaacttgtt atttcttata tatcctttga 60
cctccttaga actgacattt aactccctaa aaaaatacta gagcttgtta gtcaggcaaa 120
ctacatttac tagacttact agtactctca ttgaagaaac agtgagtata ttagtccatt 180
ctcacattgc tatccagaca cacccaagtc tggngaattt attatttatt tatttatctg 240
aggcagagtc ttgctctgtc acccaagctg gagcgcagtg gcgcgatctt gtctcattgc 300
aaggtcgatt ctccaagttc aagggtg 327

<210> 565
<211> 193
<212> DNA
<213> Homo sapiens

<400> 565
caaatacctt ctgtgcaaag atagactatg aataatgact ttgttttctt ctatttattc 60
atggtcagga aggacatatt ttccttcctt actatcatct tgctgtcaaa cttcttgagg 120
ttaacttggt tatatagtct tttacttgga aaggagagta gttaaatctg accaatttaa 180
ttgatcagaa aat 193

<210> 566
<211> 334
<212> DNA
<213> Homo sapiens

<400> 566
ggcgtctaca ttcacggcgg tcactccgtt tctgtctcct tttgtttggc acctgtcagt 60
ggatggaaga tgaaagtttc aaagctcatg gtaacagcag ggttctctac cccaggggtt 120
tctacctgtg tctggcagtg ccttaagagg atgatccaga ggcttcggag gagggcgacg 180
tgggaaggag caggtagccc aagctcccat ctcccaccca atcgttcggg cagcttggat 240
ccacgtaaca tcttgtcatt ctaaatatgt cagatttaac ttggaaaaca aaaaaaaaag 300
aattccactc ctaaaaaatt ttactaagaa atat 334

<210> 567
<211> 326
<212> DNA
<213> Homo sapiens

<400> 567
gactgtatct cattggggat acgaagctct acacacttga agatggtgaa ggaatataaa 60
aatctatgtc tcacagtcca gacttggagt acaagtaata agaagaataa aacttaatcc 120
cttaagtaga ttcaccataa gttagctcag agcaattcca gtgcaagtat ggtctgtgat 180
ccagtagtat cttacagaca gcaagttgaa cattgtggga tgcatgagct attgaggcct 240
ttgcagcttt ctgctacatg gaggctaggg ccagagtcaa gatttatgct ttgcagcaca 300
ctggtcagct gtttttgcaa atcaag 326

<210> 568
<211> 329
<212> DNA
<213> Homo sapiens

<400> 568
aaataagaaa atgtaaagga ctttgacaaa tgtaccggct cagaacattc tgagaagaca 60
atttttaat gtaaaggtga tgattgaata gttggatatg tgcacgttta gcaaaaatgg 120
gttaggcaca gttaagagta ggtattttat tcaggaagaa tagaaggcaa ctagatgggg 180
gagtttggcc tgagttttga catttgatag aaatgattgt gttttctttt ttttttttt 240
tgagattgga gttggttttt gtcctccatg ttggtagttt ttgggacttt ttcttgggtt 300
acacatcttc tagttctctg tagtgtgag 329

<210> 569
<211> 337
<212> DNA
<213> Homo sapiens

<400> 569
aaaacattaa atcttccctg gggaaaggta catcatccag agatgcaata tttaaaaaga 60
atgccccgca ttcatacaaa cattatgagg cgtatcagaa ataagaccaa ataaccaaaa 120
ccataagaaa aaaagacaag gaaaactcac agacgattgg ctaatgagac tatcacagat 180
aatttttttt aaatctatta ttaacatgtt caataaaaag atgaaaagat ggagaatttt 240
attagagaaa tggaatatct aaaaatgaat tacttgaaga gttgctaaat gaaatgtaga 300

ataactgtaa gtgaaagcac agttggtgca acagcgg 337

<210> 570
<211> 330
<212> DNA
<213> Homo sapiens

<400> 570
tgatagttaa gatcaattaa ccaattagtt acccattttc atttttcctg tatattcttt 60
gtagatcact tactaaaatg attttctaag accttcactt tcttaagtaa agaaaaacaa 120
tttgactgag acttggccat ttagctaaaa tctaaaagac ctatttaatt taaagtataa 180
gtcaagcaga gatcttatct tctgtccata aataataaga atgattgttt ttcgctaagt 240
ggaaaaagtg agatgaggca agaagttgaa gaatgcctag ccaggtagca tatgaagcct 300
acaagtttcc agccgtgggt ctgatgaaaa 330

<210> 571
<211> 185
<212> DNA
<213> Homo sapiens

<400> 571
acgacagaag gggggctacc ccggctactc ctgctcagca tggctgcttt agtgactgtt 60
ctcttcacag gtgtccggag gctgcactgc agcgcagccg cttgggcggg cggccagtgg 120
cgactacagc agggactggc tgccaacccc tccggctacg ggcccccttac cgagctccca 180
aactg 185

<210> 572
<211> 339
<212> DNA
<213> Homo sapiens

<400> 572
gaacatcaca ctccggggac agatttttt ctaacctagc cgcacaactg ctctaaggtt 60
ttatacagac cttctgcctc atcagcttcc atctcatctc atttcatgct ggatctaaaa 120
atgactctgc tgcaggaaca cacacactgc ctgacagggc tatcttaagg gcctttataa 180
ggaagcagat ggccaggcac aggggctcat acctgtaatc ccagtacttt gggaggccaa 240
gatgggtgga tcacctgatg tcaggagttc aagaccagcc tggccaacat ggtgaaacct 300
catctgtact aacaatacaa aaattaaccg ggtgaggtc 339

<210> 573
<211> 331
<212> DNA
<213> Homo sapiens

<400> 573
cctgatatca ggtgatccac ccgcctcggc ctcccaaagt gctgggatta caggtgtgag 60
ccactgcgcc tggccaatac tccttttatt ttaaaaagga caagttagac actagtttgc 120
atgcatagct tattgattat cctgcagtgg ggtcatagct ccccatttgt gatgccggaa 180
gattgcctgt ggaatcacaa gacctcttcc aatgttctgt tatgctataa aaagaccaga 240
acttttacat tttaaattaa aagaatgtct gtgcattttt aaaaaataat aaaacaaaac 300
cagtagttgt ggcagtagta gctggtagtg g 331

<210> 574
<211> 339
<212> DNA
<213> Homo sapiens

<400> 574
gcatagaagc taagaaatag taaaacttat gtaatcacat tatgcttggg aaactgtttt 60
cttgcaaaca aaggtatttg tctcttattt attgtgttga tcatgaaaat agtatctcta 120
ccctgaggtg ttacaaaaaa ttaatcaagt cagcatgtat actgcatatg tgtcttctgg 180
aatatttacc atttaatcaa gaacctaaaa aatatataac ctagctccca aaaagtaaca 240
tcagtggtta attgtcaggt taaagaaaag taaaataagg ctgggcatgg tggctcacgc 300
ctgtaatccc agcactttgg gaggtcgagg tgggtggat 339

<210> 575
<211> 205
<212> DNA
<213> Homo sapiens

<400> 575
gtgttcctgg cccctagcgt ggtaggtgcg gggttgccag ccccgctggg aagccccagc 60
cacaccccag ggtgtttgct gctctgaggc ctgggcctgc ctgggtgcta ggcttggggc 120
taggggggtg agcgcggatg ttttctaacg tgccttgtca cgcccactct agtgtgctgg 180
actctccctg agatcccgct gctgg 205

<210> 576
<211> 281
<212> DNA
<213> Homo sapiens

<400> 576
tgtttgcata tacccaaatt gacctcaaat aactttccaa atggagtctt caacagtaag 60
ttgaagtcca atattgacaa agcattaacc ttctagtgtt attttagcat tggcctaatg 120
ttagcacttt ctataagaca aatttcagtt actacatcat acctcattac tagctgttgc 180
ttgaagtcaa catgttagtt tatctatttc aaccttgtcc agtaaattat atgcaagttc 240
agaaataaaa aaaaagtata tactattcaa tctctgagat c 281

<210> 577
<211> 189
<212> DNA
<213> Homo sapiens

<400> 577
tcaattatga aattactcat ttaattgtat tgaaatatgt gttatttaaa tctctatctg 60
taacctacgg gtataacaat atgtctatac tgaggtaata atcatttaac ctggcataat 120
atcaattatt ttagaaaata tgtaactgaa aactcttcct tttcataaga gttggggaaa 180
catctgatt 189

<210> 578
<211> 331
<212> DNA
<213> Homo sapiens

<400> 578
cataattcag tttacagcaa gaagataaat tatttttgcg tggaatataa taatatctga 60
aacctccaca ggtccctttat acataacatt ctacctacaa ataagagtca ctacacatgt 120
gaagcagcaa tgtcatatga ccaataatca agagagaaaa aaaagcaaaa caagcaaata 180
gatgatctgc ataattgaag ttaacagaca agaactttaa aacaaccata attgggactt 240
ctggatagct aagggcataa cagctgcacc atttagctat atgcctccct gtatttcctc 300
cctaaagaat taaaaccaac aaaaaatggt g 331

<210> 579
<211> 325

<212> DNA
<213> Homo sapiens

<400> 579
ttgtaaaaga gttcttgaga tacagcactg aatgtaaagg aaaatattgg agcattcaac 60
tacatttgag aaataacttc tgtttattaa aagatactat aagaatgaaa gcacaagccc 120
taatgaatat tcttgtttga tactaaacca aagcttgaga agtggtagtt tcgcaagttt 180
ttcaagtggt ttggtgcaat ctgaagactg caatcccatc aatgaacttt atatctttac 240
cctttaaaat tataatttat gggccgggcg cagtggttta cgcctgtaat cccagcactt 300
cgggaggctg aagcgggtgg atcaa 325

<210> 580
<211> 333
<212> DNA
<213> Homo sapiens

<400> 580
agtgtagtgg catgacctct gcctcccggg ttcaagtgat cctcgtgcct cagccacctg 60
aatagctggg attacaggcg tgtgccagct aatttttgta ttttagtag agacagggtt 120
ttgccatgat tgccaggctt gtcttgaact tctgacctca agtgatccac ctgcctcagc 180
ctcctaaagt gcactattta tggtgagggg ttggttttga aatagtccat taaggtgatt 240
agcatttgct tttgataaag acgatttacg ggttggctgc ttttgttttc atgggagata 300
agtcccccac ttctgctatg gcttaaagtg gtg 333

<210> 581
<211> 340
<212> DNA
<213> Homo sapiens

<400> 581
tgaagattaa gaggcaggga ttcaaggctg aggaagcaac atgcacaaac aaagttacaa 60
tatgacacct tcaaggaaga ccaacaaggt agaaataggc ctgaaattcc aggtctatta 120
gacagaatgg gaggagatca aacagtaaac agattaggca gagtaggagg agatgaaaca 180
gtaaagtcag aggccagctc aggaaagatt ttaaaggcca gtcaaacatg gcacagggag 240
ccgtaaatga actggtaaat taagatcacg ggctctggac catacagcct gagttcagat 300
ctctgttgcc ccacttccta tttgtgaggc ctgggactac 340

<210> 582
<211> 315
<212> DNA
<213> Homo sapiens

<400> 582
gatgctaagg tcaatgggag caacttaggt taaagggtat ctggagtgcg atgagcagct 60
agcaatttta aatagggtgc tcaaggaagg cctaatttaa ttttcatgaa cagcacttac 120
agagtttaag agatgacaag aggtaatatc tgacttttat gagaaactct aaaaggataa 180
atgcataggt aaaggctcaa acctaatttt aataagtaag acttaaagaa ctaaatatgc 240
tgctatcaga tgcttttccc ctaacccatt tattttaaat tctatgcata tttatagaaa 300
tattaataat gtcac 315

<210> 583
<211> 336
<212> DNA
<213> Homo sapiens

<400> 583
cgtacaagac tcaggatggg cctacttcca gctaccattc agtataggag agggaagaga 60

agtgtgagaa agcccaagga tggatctgag ggaggataac agaaaactag gttcctaact 120
caagatgaga ttaagttctc ctttctagta tttattttga agaagtcagg gaatcaagaa 180
aatctctgaa cacttatata actgctgata agactgtaca ttagttcagc ccctgtgaaa 240
agcagtttgg aggtttctca aagaaacaaa aatataacta atattcaacc ccagaatccc 300
attactgggt atatacccaa aagaaaataa aatggg 336

<210> 584
<211> 341
<212> DNA
<213> Homo sapiens

<400> 584
agagccaacc tgtaactgct gatttagtta ctctatttag tcatttctag gtggagacct 60
atatttttag ccccagagac tttcttcctt ctaaggtggg acaggaaaac cacgtgaaag 120
gcgacatgct atcagaggcc cagagaatct ggagatggca gaaacttgga cacatagaaa 180
aacagggcgt ttggggccgg gtgcggcggc tcatgcctgt aatcccagca ctttgggagg 240
ctgaggcggg cagatcacga ggtcaggaga tcaagacctt actggctaac acagtaaaac 300
cctgtctcta ctaaaaacac aaaaaattag ccaggcgtgg t 341

<210> 585
<211> 331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 585
gttataattt taagcaacat aaacaagtaa gaataaatat tttagaagtg cgatgttata 60
tttcttggtt taagtggtag attgatatat gttttctatc atactaataa acaacttgta 120
aatatcaaat gcttcataat ttagaaatgt aaaacatgat aatcaaatcc aaaagtaatc 180
taacacattt aaaaactaaa catatttagg ccaggtgcag tggcccaagc ctgtaatccc 240
agccctttgg gagaccaagg caggtggatc acctgaggtc aggagttcga gaccagtctg 300
accaacatgg agaaaccctg tctctactaa n 331

<210> 586
<211> 337
<212> DNA
<213> Homo sapiens

<400> 586
gagtctttcc aaacacatcc agtgggtctt cttttattta ctcagctttt tgtttgtttt 60
tcttttacag gaactataac atttactatt ggcaaactcc aacaccatcc tcagtaattt 120
gggatgtctg tcaataccat cgttctgatt tctgaaaatt ttcgctgaat gtgacatttt 180
tcctctcaaa ctaacccctc cacagacaca cccacacaca caccacacac acatgcatgc 240
gtgcacacac agacacacac gcacatacac accacataca cgcacacaag gcacatacac 300
acacgcacac acacatgcac acacgtgcac acatacg 337

<210> 587
<211> 322
<212> DNA
<213> Homo sapiens

<400> 587
gcatgcccct agggaggtgg gtgtgatcag ttttttaaca atttttaaag cttaaggatt 60

cattaggaaa tttgaggctt gttataatcg gacagtaaca tcaaaaaatc atctacaggg 120
agtagctttt ttcttttttt tttcggagat gaagtctaac tctgttgcca ggctggagtg 180
cactggtgca atctcggatc actgcaacct acgcctcccg gggtcatgcc attctcctgc 240
ctcagcctcc tgagtagggg ggactacagg tgcctaccac cacgcccagc tatttttttt 300
tgggactttt agtaaagaca gg 322

<210> 588
<211> 325
<212> DNA
<213> Homo sapiens

<400> 588
tctcacttga tcctctcagc aacccccttga ggcaggtact aatgtgatct ccatgctgca 60
gatggggaaa ctgaggccca gggtttatag aatcaaaagg ctggcacatg gaattggtga 120
ggatcctgca ggtcctcagc aggatgcgag gagtggcctc ccagggacag gaagagccaa 180
gagcagcagg agtacagcag tgtgagaaag aaaatgccgt cagaccatgt gaggtggctc 240
acgcctgtaa tcccagcact ttgggaggcc aagacagaag gattacttga ggtcaggagt 300
ttgagaccag cctggccaac atggg 325

<210> 589
<211> 221
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(221)
<223> n = A,T,C or G

<400> 589
atgctagatg actccatcag ccaatatgtt agcattatct agaggcctta tgtgaagtcc 60
tagtggtcct ttccagttct atgactttaa acatacaggt gaatcaaagc ttcaggaagg 120
cctagaccaa cagctattac tgaagctccc atttgtgctt aggactatgc atagagaaac 180
tctcctttgg gacttggtta gggtccaaag ccctaaggtc n 221

<210> 590
<211> 289
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(289)
<223> n = A,T,C or G

<400> 590
tagcaggagg tagaagaaaa agttattgaa gctgaaatag tgatccttag ccttagggac 60
agtgtgtgtc agaggttaga gcatccagca tggctggtgg ccagagcttt gcatcagtct 120
gagatgtatg tgatgtatct ttagctcagg gaagagagag gacttgattt ttgaggaagg 180
cttgggaagg agggatagaa gagctggata gttttgctgc tccccagcca gaaatttata 240
gtttgatttc attattgcct tgaaatattg ggatgtccca gaacacacn 289

<210> 591
<211> 340
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(340)
<223> n = A,T,C or G

<400> 591
cagtttgttc ttaaagttaa actaatgggg aaaaaaaaca ggacagggag gtatctcaag 60
ttcatttgag ccatttttaa aattttggta gctggtttct gtttttcttc tttttaaaat 120
agcaacaact taagattttg tgtgccacca gcttccattc catttcataa aagcttaatc 180
tagcaagaat tggtgagccc tagtagaagt tagaaagaaa tgttgaagtg tgtatgtgtg 240
tgtgtgtgcg tgcgtgtgtn nncccatcat actcaccttg gacacttttt aaaaaaacgc 300
ccttggctgg gcgccggggc ccccccctgt aatcccacca 340

<210> 592
<211> 315
<212> DNA
<213> Homo sapiens

<400> 592
ccatggccag gcttgtgagc tcacatcaga aatgaaattc agaagtcatt cagaatctta 60
ccaaatccag tttttactct tgatttaaaa atattttact ttttaaaatt aattattgtg 120
gctcgcccag acttggcagt tagaattgaa tatcaggaaa ggttttaaga caaacctgac 180
gaagaaagtt gaagtagtca cagtatctag aaatacaaga gggcctcttt tctcaggctt 240
atattttgag ataaatttcc tctccttagt acatgcaggg aacatttcat ttcataagtt 300
tgctgattaa aaagg 315

<210> 593
<211> 319
<212> DNA
<213> Homo sapiens

<400> 593
aggacactgg cttgccaaac aggagtctgg gcacttagca gccagtgctc tgtgcaaacc 60
agccagtgct ctgaattcag atgagagctt tgtgtttgcc ttattggaaa gcccttgatt 120
cctgggcttc tagaggtatg tatcactcaa aatctctgca gttcttttag ggtaagtgaa 180
cgctttactt cttcatctat tagaaaatta ttctctcagc agggtgcggt ggctcactcc 240
tgtaatccca gctcactcct gtactttggg aggccgaggc gggcagatca tgaggtcagg 300
agttcgagac cagcctgac 319

<210> 594
<211> 328
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 594
ctgttgccca gactagaggg cagtggcacc atctcggctc actgcaatct ctgcctccca 60
ggttcaaatg attctcctgc ctcagcctcc tgggtagctg ggattacann cgccngnnca 120
gagcccaant aatanttgga ttgtttagta gagacggggt ttcaccatct tggccaggcg 180
ggtcacaagc tcctgaccgg gtggagaagg gcttttacga gtagaatgag ccttttggga 240
ggtggctgcc tgcaattctt tttttgattg gattcaaata cgctgcttga gcttaagcac 300
cttacgaact tttgaagatn ttaaaggt 328

<210> 595
<211> 339
<212> DNA
<213> Homo sapiens

<400> 595
cttaatcatt cttacagtat ttgagttgag aacatttata aagatttcaa gcattacagt 60
ataaacaata tgagaagatt cttccaaatc ttttaacttg aatgcaatta ttagcatgcc 120
cctagggagg tgggtgtgat cagtttttt aacaattttt aaagcttaag gattcattag 180
gaaatttgag gcttgttata attggacagt aacatcaaaa aatcatctac agggagtagt 240
ttttttcttt ttttttctga gatgaagtct cactctgttg ccaggctgga gtgcagtggt 300
gcaatctcgg ttcactgcaa cctccgcctc ccgggttat 339

<210> 596
<211> 194
<212> DNA
<213> Homo sapiens

<400> 596
gagcacctct gtgttcctag gtctgtgcag tgacttggga gtacagtgat gaatgggacc 60
atatggtccc accctcatgg gcagtctcta attcctgcct tatgaactga agatctattt 120
cttgtcctga ctttatattc ttcatggcta aaagatttgg ggcctctgaa gagtgcattt 180
gaactcaggc atgg 194

<210> 597
<211> 339
<212> DNA
<213> Homo sapiens

<400> 597
gatgccttga gagtttcctg ttgcacaatc tgtttgtctg tagagaagtg gcatccagag 60
ggcggtaggg gaggaaaaaa aaatgaagta atgggacaga gcagacacag gtaaagaggg 120
ccttaggtcc tcaggaaagg ggaaagggag ggatatggcc cttccctcca ggtcctcata 180
tttgttgccc cttgttctgg aacggaccca gaggcttgcc ttcagagggt tctaatttac 240
tctgtattct gtgtggtaaa agcaagaggc agcatgtcca gtggactgtg agactgagca 300
ctctaaagcc agtagggtca agtcactggt agcccactg 339

<210> 598
<211> 333
<212> DNA
<213> Homo sapiens

<400> 598
actgcaacct ctgcctcaca ggttcaagcg attctcctgc ctcagcctcc caagtagctg 60
ggattacagg cgcccgccac cgtgcccggc taatctttag tagagacggg agtttcacca 120
cgttgcccag gctggtcttg aactcctgac ctcaggtgat cctcccctcct tggcctccca 180
agtttttaaa agatcatgct atgtggataa tgagctgggg atggagggaa gaatggacct 240
agggtggaaa ccactggtta gagtagagcc acttcaagtg catgggtttg ggctataaag 300
gtagtgctgt gagcaaaaat taaaaactct tgc 333

<210> 599
<211> 340
<212> DNA
<213> Homo sapiens

<400> 599
gtgctgcatg tttaaagtat tccctctgtt ttacttcatg atagttggcc cctttcaggt 60

tataacacgg acatttttct atggttttca ttatttgcac atgccaacag agtagaatag 120
atttttaacg agcatcactt cattgcaagc aaatttatta atccagtggt actgatgaaa 180
ctaaggagct ctttggggtc aggctcgatg gctcacgcct gtaattcttg cactttggga 240
ggctgaggcg ggtggatcac aaggtcagga gttcaagacc agcctggcca agatggtgaa 300
accctgtctt tactaaaaat acaaaaaaat tagccgggcc 340

<210> 600
<211> 322
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(322)
<223> n = A,T,C or G

<400> 600
ctgtgttgca ggcataaacc caagtggctt ttaaagatca gctgtgatta atagtagtca 60
gttggaagtc agagtcatca gtttaaaatt tagctcaaca aatggtggct tgcttggtag 120
ttcctgtgtt taacattatt tttggaagaa aaagaaaaaa aaggaaggta gaggaaggga 180
gaatgttttg attgttttct aatttattga tctctccctt gcatcatcac caagactgtt 240
aactggttcc cagaatgttg tgggttgagc ttctgtgctg taatgtggtt tgatttttt 300
agaggggaga taagggtatc tn 322

<210> 601
<211> 318
<212> DNA
<213> Homo sapiens

<400> 601
tttccctgct cacatgttac ctttgacaca ctctggatct gaggaagtcc ctaattatct 60
cttgcttttg cagactgctt acttgctgtg tggctctaag caagttactt agcctttctg 120
ggccctggtt tcctcgttta tgaaatgaag atgatatgag cacctaattc atagggctac 180
tgtgaggata tttaagttat ttaacaatga ctggcccatg gtacttattc caggaaacaa 240
atgagtataa ttataagtat tttcaggaca attctctgtg atgtaatcac tcctatttta 300
cagagaagga aacatatt 318

<210> 602
<211> 326
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(326)
<223> n = A,T,C or G

<400> 602
ggttcaagtg attcttctgc ttcagcctct ccagtagctg ggattacagg cgcgcaccac 60
catgccctgc taatttttgt atttttagta gagtcggggt tttaccatgt tggccaggct 120
ggtctcaaac tcctgacctc aggtgatctg cccaaagtgc tgagattaca ggcatgaacc 180
accgggcctg gtcaagaata aggtcattta ttgttgtata ggcaataagt gtgaatcaag 240
gatactttta aaaactcata ggtgagcccg ggcatggtgg ctgggatcag cctgcacaac 300
ccgtagtgag acaccatctc tacaan 326

<210> 603
<211> 342

<212> DNA
<213> Homo sapiens

<400> 603
aggatttaaa acatttcctg cagagagctc atagctgggt ttatcttata gattaaaata 60
aaaaggagct accagaaggt ctgtgtgtcc aatacacttt gttaccatct atcaagtcta 120
ttttcttaag ttgtcagagc tgtttgcatt cataataata gctttatcaa gaatcagctc 180
cttttctagc atcaaaagtt aagaatttag gccaggcgca gtggctcacg cctgtaatcc 240
tagcactttg ggagactgag gcgggcagat cacttgaggt caggagttca agaccagcct 300
ggccaacatg gtgaaaccat gtctactaaa aatacaaaaa tg 342

<210> 604
<211> 317
<212> DNA
<213> Homo sapiens

<400> 604
ttgtattagg taatagaagt taggatttca gaacgtcatg ggagacctgg gggagactgc 60
ttgttttgaa gttgaaagca gtacattcaa atatgtaagt gacagcatag aaaaatgtat 120
atagggttaa cgtgcagagg tctgtatttа ggtttttctg taagtttaaa tcctgttgtt 180
taaaacaaat attcggataa gaataacact ttaaaaccat tcaagggctg ggcatggtga 240
ctcatgcctg taatcctagc actttgggag gccgaggcag aggaatcact tgagcccagg 300
agtttgaaac cagcctg 317

<210> 605
<211> 316
<212> DNA
<213> Homo sapiens

<400> 605
ccttatatat gctgtactga agacatacta tcacattaac gttgcgttta tgtctatgcg 60
tgagaattgt atttctgtgc ctaagaactt tgggggagga atcattattc ctgctctgat 120
attgacgctc tctctttcaa cagaaatgga ccttttacaa tattgaatgg atctcagaga 180
agataatgac ggaggctcta gatctctagg actgagagaa cacgcttagc acatggggta 240
agatgggatt gcatctctca aacatgacac ctcctgccta cactgactca accggccatc 300
aggctttgga aaactg 316

<210> 606
<211> 340
<212> DNA
<213> Homo sapiens

<400> 606
gaattgtcct agattatcta atccgctagg accagaagag gaatttctgg gttattgtgg 60
taaagtttca tgtgatgaac catccttgaa ttctctcaga ataaacacca catggtcata 120
acatgttaat tttattattt ttttgtgagt gtgagacgga gtttcactct tgttgcccag 180
gctggagtgc aatggtgcaa tctcagctca ctacagcctc cacctcctgg gttcaaggga 240
ttctcctgcc tcagcctcct gagtagttga gactacaagt ctgtgccacc acacttggct 300
aatttttgta ttattagcaa agacggggtt ttaccatatt 340

<210> 607
<211> 241
<212> DNA
<213> Homo sapiens

<400> 607
ccttagaact atctattaaa ttctatcaca ggagatcatt ggatcacaac agggcagtac 60

tttctgctga taagagtata gaaatattat agagatgtct agttaccaac acgataggaa 120
aggggcatt atcagccttt agtgatgagg accaaggatg taaaataccc ttctgtgcag 180
gacagtacct cagaaggaag aattctgctg taacctccag gtatctgata agtgaaaagc 240
t 241

<210> 608
<211> 320
<212> DNA
<213> Homo sapiens

<400> 608
aataaataaa ttatgtatcg tcggaggttt ttactgggga gagagctgta ggtaattgtt 60
gcaccacaca gatgctccct ccaggactga aggacttacc cctccagctg ctgggattat 120
agttggctga cactctccag cagctggcag tttccaggaa ctgcctgtgg ctgaagagaa 180
ccaccttact caaagttcta ccctcctcct aggggcagct gcatccaatg actggcctat 240
gtggaggtat aaatccatct tgccaatatt catacttatt tacataattt acaatattca 300
tacttaaaga atctgggccc 320

<210> 609
<211> 235
<212> DNA
<213> Homo sapiens

<400> 609
acccttttgat ttttttctat cccacaacaa tggagccagt ttttttttt ttttttaaa 60
tctgaaaggg ctctgggttt cacttaaaag gaaggcaact caaactgact taaacgatac 120
ttgacaaaaa agggggttt tgtttttctg cattgggcgg atggctttct gcttttataa 180
ctggaagatc cagggatggg ggggaaatca agattgactt gccttaactg ctcag 235

<210> 610
<211> 341
<212> DNA
<213> Homo sapiens

<400> 610
aggacggctc tgtctggaat ctttgaggcc gggaatacag gagccctaat gtgactttgg 60
actcggaatt acctggaaat cagtgatttg tgccccacgt tatgaagcta tcaatttcca 120
aagacagtta aaagacccct ggctcaaaat ggatagttaa catgaccaaa aaactaaaac 180
tgacttttga gtactgtatt agacagtcat taactaaacc taagatatta ttttcttttg 240
ccagtagtgc tttgttagct tgtgtgccat aggggtgagc tcagtggtat tctgacaacc 300
tatgattcaa cccttcctat taaaaaccac agttcttgtg t 341

<210> 611
<211> 334
<212> DNA
<213> Homo sapiens

<400> 611
ataaatatga acagtagaag ctacagaaaa atgctgttga gtttttcaaa actatggctt 60
ttttttttag gtaagtaaag ggaattagta ggggtttccc tgttctattt actaatagaa 120
atcgatactt gcgataacct cactaatctt cacatctttt atccaatttt atccattcat 180
actataaatg attattcatt accttccact ctgcagggag atggcaaaac caaacacaca 240
tatattctct ctcttcctct ctctctcttc ctctctttct gacacacaca caaacacaca 300
cacacacata tcagatgtta aagaagttca catg 334

<210> 612
<211> 332

<212> DNA
<213> Homo sapiens

<400> 612
ataaatatga acagtagaag ctacagaaaa atgctgttga gtttttcaaa actatggctt 60
ttttttttag gtaagtaaag tgaattagta ggggtttccc tgttctattt actaatagaa 120
atcgatactt gcgataacct cactaatctt cacatctttt atccaatttt atccattcat 180
actataaatg attattcatt accttccact ctgcagggag atggcaaaac caaacacaca 240
tatattctct ctcttcctct ctctctcttc ctctctttct gacacacaca caaacacaca 300
cacacacata tcagatgtta aagaagttca cg 332

<210> 613
<211> 331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 613
ctcccagagt agcgtgagat tacaggtgtg agtcactaca cccagctaat ttttttttt 60
taaggggaga tggggnctca ctatgttccc caggctggcc ttgaactcct ggcctcaggc 120
agccctcctg cctcaacctc ccaaagtcct ggaattacag gcgtgagccc ccatgcccgg 180
ggcattcata tattatacac aacaacccgc aggctccatt catgcacgaa cccccattgt 240
cttcggccct ttccagccct gcgctcgcat cattccctct atctcgggaa cccgcgcccc 300
tcccccttt caagatggtc cacccctcgc c 331

<210> 614
<211> 326
<212> DNA
<213> Homo sapiens

<400> 614
taatttctgt gccccttac tcaaagatag gacaagacaa agaaaatgaa aacagacaca 60
aactccaagg tccatgaaac cagaaactaa tcctgaacca tgctaacaaa atagaaagct 120
tatcaagtga ttataaacca ctctgcatat aagcagcata taagtccaaa tgcctgcaga 180
gagtactgtg ggactcagaa cagcacaggg actagagcac gcttgttcaa cctgaggcct 240
gtgggccaca tgtggcccac gacagctttc aatgtggtcc aacacacatt cataaacttt 300
cttaaaacat tacaaggttg ggcgca 326

<210> 615
<211> 304
<212> DNA
<213> Homo sapiens

<400> 615
agggtagaac ctatatgttg ctattgtatt gctatttatc tacttaaata actcttactg 60
tagtatgtat tgctcaagga cagagattgc gctgctcatc tttgtgatat cccacttagc 120
atagtttcta agcaaatagt atacttcttt catatatgct tatcaagtaa atgaatttga 180
ctctacctcc tattgaacta ttcagaaatt catgtttacg attttagcaa tgagaacacc 240
aagacttatc tatagagtat cagagataat acaactaggg agtagatcta aaataagaca 300
tctg 304

<210> 616
<211> 321

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(321)
<223> n = A,T,C or G

<400> 616
gaggtttcat ttgtggtgac attctctccc aggccacaaa acatttcctg ctcggaacct 60
tgcttactaa ttgtaagaac tttaccagta agaacttgct ttaaaaactt agcattcaaa 120
aaaaaagctc tctttaaaag ttatttgatt ttcttggttt ttttcttacc atgctatatt 180
ttgagtttca cctaaaaaac taaggttatc ttatctaatt gctttaaatt tatacattta 240
gtcacattca acaatttgtt gctaatcatt ttgccagatg ccaggctttt ccaagaagtg 300
taggatccca tccttgaatc n 321

<210> 617
<211> 239
<212> DNA
<213> Homo sapiens

<400> 617
cagatccaca cttcggatga aaatggctga aaaggaggca gagatggcag aagactaaag 60
gaaagcgccg agctgtgact tgacgcccat tccaagggca gtgtggctct tgtgagacca 120
aaagaagagt aggaatgaac gcgggggtcc tgtgagcagc gggtggcttt gctgagcttg 180
gtgctcttag aagaccagcc acttttgtcc ctgcagcccg gggccacaga gccagacac 239

<210> 618
<211> 317
<212> DNA
<213> Homo sapiens

<400> 618
gatacttatt ttgctatcca cacttgatgc aattgaattc aaggtgcaaa gtcttgtact 60
gaagcagtct ccttgttgct tggagaacac ctccttcaga gccctttgtt aaataagagg 120
ggcgacgttg atcatagatg ccacctggtt agcaccgaat ctgactttgg tgacagtcct 180
aaagcacagc tggtgattgt gagatctgtt agcggcaggc tgagcagata ctacttggtt 240
ttgcttggta tgagatacta ctgtttgctt agtatgagat tttttccagc ctgtctctta 300
aactcctgtg acatctt 317

<210> 619
<211> 318
<212> DNA
<213> Homo sapiens

<400> 619
cggacctatc cgtattgcgg accccaaagc tcttcccggg gcctttcttt ctctttgaca 60
aagcatagct aaggtagctg ggaaaggtgc caagagagag aagagagaga agcgatccag 120
aagagagagc tcccaccctc gctgctgact ggcctgcgac cttcaggcct gcctcttaca 180
ttctctcgcc cttcccaaat tattactaac acatgagtct gacatacagc gagctccaca 240
gaggaaagac ctgtattctc tggactatac agaatgatct acggacagag tgataggagg 300
ctgagtccac actctgga 318

<210> 620
<211> 317
<212> DNA
<213> Homo sapiens

<400> 620
tcccacccga cccaagcacc tgtactttgt cactctccca tttctggcta gaccaggact 60
ccctttgaca tctctaacct tgcagaggtg tgactctgcc agagcactct tagatgtcgt 120
acaggtgcat ttgaagcctt gtattttctc ttaaaagata actggcgggt aatggagcgt 180
gctgactcta ttgctaaaga gaaagaatag gctgggcgcg gtggctcacg cctgggagcc 240
actttgggag gccgaggcag ggggaatacc tgagggcagg aagttgagac cagcctggcc 300
cacatgacca aaccccc 317

<210> 621
<211> 315
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(315)
<223> n = A,T,C or G

<400> 621
gtagatcatt ttatttcctc ttaatgttta tactgattac tgttacatta gctggatttt 60
tcaaaacaat gttgaagagt gatgacagac gtgactgtct tgttcttaat tttcatggaa 120
gtaagaatgc aaaatattaa tagggaatag tattccctat tagtatgaca tttacttttg 180
gttattagta ggtagtcatt aacatgttta agagtttccg ctattcctgt tttatagtgt 240
tattgctaga agtggttcct gaattttata aaatgccttt tcagcatcta ttgatanaat 300
tgtatgattt ttttn 315

<210> 622
<211> 342
<212> DNA
<213> Homo sapiens

<400> 622
aaagtgttca gtcctagatg tttaactcct tagctacttt tgtaccaggg atcaaactga 60
ttgaaagtaa atggtttatg tgggtcaaaa atgaggaacc aggctttgcc attaagcttg 120
attcttctaa ctctagctga gtcccaccag gctttttctt ggcttctgta atcatgaact 180
atttccaata gccagtggat ataaggagct atagtagaac caatggatgg tttatagttg 240
agacctctg cattgtatgt tacctatttc aagatttaag agtcattgct gggcacggtg 300
gctcacacct ctaatcctag cactttggga ggccaaggtg gg 342

<210> 623
<211> 339
<212> DNA
<213> Homo sapiens

<400> 623
tatatatgat aggaacgtga gcttgaggag tcgcaattgc tggaatttgc ttggggaatt 60
tgcctgcccc aaatgaagct cctcttttcc cttaacctag cttctcaaga ttctctccct 120
tagttgaaga tattactcgt tacctaatca tccaagaaag acctcagaga attactcttg 180
actccgtcct ccttcttact ccctattata aatcccacat agtttgcctt gtgtaaatat 240
ttttcaaatt acccaccccc cattcccttt cctgcttcca cagctgtgat ggaatccctc 300
aactttcttt tcaatatttc ctgtagattt agacaaaaa 339

<210> 624
<211> 336
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(336)
<223> n = A,T,C or G

<400> 624
cgctgggagc ccctcggcat catgctctgg ccagcaaagc ccctgcggca gcggcagcag 60
ctgtggctgc catcatcctg gacaccatgt tgccttgaga ggcaattgtt ccttccccca 120
ttccatgggc actttcccag ttatgacaca ggatgatctg gtcccagtgc tgtaatgggg 180
agtggggatc acaggtgggg caatggagga gctctgaaag tggctttgga tatctcacta 240
cccaaaagga aaggcattag ccaccatggc cccaacaaaa ctaaaataaa aaggaaaggg 300
ggtcaggcac ggtggctcac gcctgtaatc ccagan 336

<210> 625
<211> 333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(333)
<223> n = A,T,C or G

<400> 625
ggtttctcaa actggcttga ggttaacaat tacctgagcc atgtattaaa aaatggagac 60
tccagagtta ctgaagcagc atctacaggg tggggcccag gaatctatat tcttagcaga 120
tgtgagcctt accatctggc cctttggaaa atgatgcaag aagaaacttc tctgggagaa 180
tttcaatctg gaggcagcag gggaggggag tgatcttgca gagcctgtgg catcatctgg 240
tgcccatgac aagacaagag tggctctggg ttcttcttag gcttcccccn atcccctcct 300
cttagaacta tagccattcg tcacatgagg tcg 333

<210> 626
<211> 336
<212> DNA
<213> Homo sapiens

<400> 626
ttaatatacg gaagtagctg tcttcctaca ccttagtcaa tagctaatca aacttcttaa 60
tcatgttaat cgggtatttt taaaatgctt tcagtatagt ttcaatttgc ttaactctta 120
cattgactgc aactgaggat catttcatac atttaggagc cacttgtctt tcctttgaac 180
tgtctctgaa tgtgcccact tgtctactca gttgttggtc ttttctatca gcaagcgatc 240
ttgcttttta aaggaaatta gccctttgaa catgctgcat ggcaactatt tcttcccagc 300
ttatcactgg agtcccaatt ttgtttatac tagttt 336

<210> 627
<211> 337
<212> DNA
<213> Homo sapiens

<400> 627
caagatgctt cagaactttc tgtatccact gacagcccag ctgataagta tatcaaaaag 60
gatattactg taagctagtc atatttgaaa atagctgata tgttagctct tttttattga 120
gagcagatat acaaagtatt tcatgatgct ataggatatt aacaattatt tctctcaaaa 180
ctcttctgag ggaagactcg gctattattg aatgagttct gttgaattct ctctgttccc 240
tcaattcttc tacctccact gcataaatat atattgcata ctggccaagt gcaatgactc 300
acacctgtaa tcccagtact gggaggccga gatgggg 337

<210> 628
<211> 333
<212> DNA
<213> Homo sapiens

<400> 628
ggcctctact gggaaccacc ttctgcagga cagtcaccag gccagatcca gaaggcttga 60
ggccctgtgg tccccatcct tgggagaagt cagctccagc accatgaagg gcatcctcgt 120
tgctggtatc actgcagtgc ttgttgcagc tgtagaatct ctgagctgcg tgtagtgtaa 180
ttcatgggaa aaatcccgtg tcaacagcat tgcctctgaa tgtccctcac atgccaacac 240
cagctgtatc agctcctcag ccagctcctc tctagagaca ccagtcagat tataccagaa 300
tatgttctgc tcagcggaaa actgcagtga gga 333

<210> 629
<211> 328
<212> DNA
<213> Homo sapiens

<400> 629
gggagcccaa agacagtgac agggcatggt agaagggact tgctggactg ttcacctttc 60
caggccaccc cttgaaagga agcagatgtg ggcaaaaaag agcaactcca tttttcacac 120
agtcagagcc agcccaactg cagatggcct gtacatcgca gcaccaagca catcctggt 180
ctaaagtgtc agttcttttt ttttttttta ataaaacttt aagttctagg gaacatgggc 240
ccaacgggca tgttggggac atatgaatac atggcccatg ttgctgggct gccccccatta 300
actgggcatt ctaagcaaac tatcggag 328

<210> 630
<211> 331
<212> DNA
<213> Homo sapiens

<400> 630
tgcttcctcg gggctgggag aatgacccta attctgaggt ctctgggcgg ctgtgttctg 60
cctggaaaaa gcatctctgg ccacagaatc gatgttcatc ttggagacct tctaggctta 120
agctgccttt tgtctaaaga cattcaatat tggtatgatt tcttgagctg tgtaacattc 180
acatggctca aaaatcgtgc aaatgtgcca ggtaaagagt gcaaagcagc caggcacagt 240
ggctcacgcc tgtaatccca acattttggg aggccaagga gggtggatca cttgaagtca 300
agactttgag aacacgctgg ccaacatggt g 331

<210> 631
<211> 328
<212> DNA
<213> Homo sapiens

<400> 631
gaagcctcta ctgggaacca ccttctgtag gacagtcacc aggccagatc cagaaggctt 60
gaggccctgt ggtccccatc cttgggagaa gtcagctcca gcaccatgaa gggcatcctc 120
gttgctggta tcactgcagt gctcgttgca actgtaaaat ctctcaccta ggggctgagc 180
aactcactga aaaaatcctg tgtcaacagt attggctctg aatgttcctc acatgccaac 240
accagctgta ttatctcctc atgcctggtc cctcttataa acaccacata atttataccc 300
agattctgtt ctgatcaccg gtgaaccg 328

<210> 632
<211> 329
<212> DNA
<213> Homo sapiens

<400> 632
ggtccacccc aagtctggct tctctcagga gggactcatg aacacgtgcc ctgagcaccc 60
ccaaaatgac atcacacaag ggcagaaagg agctgaaggg ggaacgtgaa aggcagaaag 120
ggagccgtgg ttgccaggca accagcccta gcccaccttt gtttgtttgg tgacagcaac 180
taaagtctgg tcagggccgc ttggccacgc tcatgccttt tcctctcaac agttgcttct 240
ttgagtcagg gtgcagctct ggtcacctgg cggcctcttc agctcagccc tccacaaagt 300
gtgagcctga aggaccaccc tgaattgcc 329

<210> 633
<211> 196
<212> DNA
<213> Homo sapiens

<400> 633
agatctatta tatcttaatc tctttccaaa agctattcaa atgaagagct ccctattggt 60
atcaataata gattattcat tttagttttg aaaatataca tctgcttctt agaatacaaa 120
ataatgtact ctgttttgtg ttggctatat ttaatatctc ttagattaaa actgttcata 180
aaaaagtaat ggcacg 196

<210> 634
<211> 331
<212> DNA
<213> Homo sapiens

<400> 634
gggagcccaa agacagtgac agggcatggt agaagggact tgctggactg ttcacctttc 60
caggccaccc cttgaaagga agcagatgtg ggcaaaaaag agcaactcca ttttttcacac 120
agtcagagcc agcccaactg cagatggcct gtacatcgca gcaccaagca catccctggt 180
ctaaagtgtc agttcttttt ttttttttta ataaaacttt aagttctagg gaacatgggc 240
acaacgggca tgttggggac atatgtatac atgggccatg ttgctgggct gccccccataa 300
actgggcatt ctcagcaaac tatcgcaggg a 331

<210> 635
<211> 318
<212> DNA
<213> Homo sapiens

<400> 635
tattcaacca tctaaaactc tgccttcata ataatgatgg atttgctgtc atcataactc 60
attcgtaggt aatcttgcaa gagctgaact ttggaactac tgccatttgg aagggttcca 120
ttcactctaa gggaaacctg agaatctgag ttcatttact ttttattccc ccttttagca 180
gtaatttgtt catttacctt taatgttgaa aggaagcagg ttgaggccag ccatgatggc 240
tcacacctgt aatcccaaca ctttgggagg ccgagaccgg cagatcactt gaggccagga 300
gttcaagacc agcctggc 318

<210> 636
<211> 315
<212> DNA
<213> Homo sapiens

<400> 636
ataacaggcc cagactgcct gctgccagca cccaggcatg ctatctgagg ggcctagaaa 60
tcacttcacc ctgcccacca cagcccatgc ctgagcgcat tatcaggggc ctgaggacaa 120
gcccacccca catgtactac tcaaaccccc acctgcacaa gcatgttgtc cagagggatg 180
gggattgtca catcctgcat accaccacta catagacaca cacacacaca cacatgcact 240
cacacattcc aggggcctga ggatgggcct gcccagcatg ttgccaccac caccaccagc 300

acccacctgc accat 315

<210> 637
<211> 314
<212> DNA
<213> Homo sapiens

<400> 637
gaaaactatg gcaggaacac agtctcacag ccaagagaga tccccaccct tgagaagaca 60
ccttcctgcc tgcctgtaca gccccctcgc agaggctgca ggtatcaagg gctgatccca 120
tgctcccaga gcgctaccaa ggaagggtct tcagaaaaaa atgctcatga ggcaaggggg 180
ctgcaacccg tgccacagaa agccagatct ttctttgcac cagttgtaca gtttctgcaa 240
aactgaagac tgacattgaa aacgactgct ggtcagctat tccttgatca ctcctagaga 300
gtgtatgtta ctaa 314

<210> 638
<211> 342
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(342)
<223> n = A,T,C or G

<400> 638
gacacaggtt ggagcagaga aagaggaaac atagaggtgc caaaggaaca aagacataat 60
gatgtcatcc aagccaacaa gccatgctga agtaaatgaa accataccca acccttaccc 120
accaagcagc tttatggctc ctggatttca acagcctctg ggttcaatca acttagaaaa 180
ccaagctcag ggtgctcagc gtgctcagcc ctatggcatc acatctccgg gaatctttgc 240
tagcagtcaa ccgggtcaag gaaatatata aatgataaat ccaagtgtgg gaacagcagt 300
aatgaacttt aaagaagaag canaggcact aggggtgatc cn 342

<210> 639
<211> 339
<212> DNA
<213> Homo sapiens

<400> 639
aaagaatgta ctggcctcaa tttctgataa ggtatggatg aaccttcctc atgccagaca 60
agaaagcagg atagattagc acactatgct aaaatgtatt tcttcaaatt aataaaccta 120
catgagataa ttcacattag ccaataagcc agaatacagt aaaattatat aacaataatt 180
atttttctaa gaagtgagga aacagatgaa taaaaagtga atccctccca ggaaaggtaa 240
acagcaactg tggcccaatg tctctgcatc tctggaaata aggagctgaa gaggctggaa 300
aggtatattg acagaaagct gatataagag aagagatgg 339

<210> 640
<211> 304
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(304)
<223> n = A,T,C or G

<400> 640

tatactatct ttaactggtt tttcacgatg gggcactagg aatctcgaca ttaatcttgc 60
acagaggact tctacagagt ctgagaagat atcatcatgc tgaatctgat catactgctt 120
tttaaaagtt taaggataag acatgtgtat atgtaacaaa acacattgca tctagaaatc 180
aaaacttgaa agtatttcca gggattagga ttagaaggaa tattagagga aacttgaaat 240
ctgagtttaa aaagatttta ccttttttgat tgctgcagaa atgtcctatg cactctttgc 300
aagn 304

<210> 641
<211> 324
<212> DNA
<213> Homo sapiens

<400> 641
aaagggctgg gagtggggca aagatgatag tgacaatgtc cgattggcca ggtaagccag 60
gcctagtctt ttcatctatt ttgtgctggg atttcttcca catgtggcat ccatctccca 120
gggatttttc ctcagctcag gcaagacagt cacaagctaa gatgagtttt gggaagatgg 180
ggaggtagag gagaggttgg gcaccaggac tctttcatgg tgcagctgct ttttctccct 240
gtgaaagaga tgggaatcct agcatctcaa cttgttcttt tcttacaata ggaaaagtgt 300
tcatacactg attcatctct aaag 324

<210> 642
<211> 315
<212> DNA
<213> Homo sapiens

<400> 642
cttccatgca ggaatcttct ctttcagtga ttctgttgta tttccagctt tcctgagcca 60
ttgaggccca ccatagggtt ttgcacatag taagggctca gaaaatacga gttctcttcc 120
tctttcactt tatcaccatt aggccttcca gccagacttc atatctttcc tttccttcct 180
atcttgggtt acgccatctc tctcactaag agttctttgc tgaccctggg gccaaattag 240
caagatgtga ccaacagcac tgcaatagac atcagaagac ccaaacccta ggccacctct 300
aggctagccg tggaa 315

<210> 643
<211> 338
<212> DNA
<213> Homo sapiens

<400> 643
gagggttttc aggcagagga acagttggcc aaggaagtca gcttctcaga gctcaagagg 60
ttctgtttta actgtgaatg gtaaaactga gaactatatc ctggatacta cacctggctc 120
ccaagcatct ctgatatgtg ctgttcaaaa ccacaccaga gaggaagaac tgctctggta 180
ccgagaggag gggagagtgg atttgaaatc tggaaacaaa atcaattcca gctctgtctg 240
tgtctcttcc atcagtgaaa atgacaacgg aatcagcttt acctgcaggc tggggaggga 300
tcagtccgtg tccgtttcgg aggtgctgaa tgttactt 338

<210> 644
<211> 337
<212> DNA
<213> Homo sapiens

<400> 644
tatctcatag agtactggga ttctgaaagt gaaaggttta tacccagtaa aagtatggga 60
gtgctggacc aagctaacat gtacaagaag aaatatggta tatatttatg gaaatagata 120
atgaaaatgc tgaattgaag agcaaagttt ggacaatgga gaatttttca gtttatcaat 180
attggtgcac tcttccatga aggagtattt aactctgtga taagtaccct ggaagaatga 240
agttatatta cgactatgtt ggagcttggg cactagaagc atgctgaaag tgttttccac 300

tttaagtgaa gtagaaatgc taagaggtgg ccgggcg 337

<210> 645
<211> 335
<212> DNA
<213> Homo sapiens

<400> 645
gagtacaccg tagccaatgt catctctgtc ggctcggggc tgctgagcgt ttccgtggga 60
cttgtggccc tcctggcgtc caggaaccct cttcgccctc cactgcactg ggtcctgctg 120
gcactagctc tggtgaacct gctcttgtcc gttgcctgct ccctgggcct ccttcttgct 180
gtgtcactca ctgtggccaa cggtggccgc cgccttattg ctgactgcca cccaggactg 240
ctggatcctc tggtaccact ggatgagggg ccgggacata ctgactgccc ctttgacccc 300
acaagaatct atgatacagc cttggctctc tggag 335

<210> 646
<211> 337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(337)
<223> n = A,T,C or G

<400> 646
gacacgcgtt cctcaccatg gctttgatag aggacactgc atctgagata atgttgccag 60
tgattggatc cagttcctga ctgggcttct gactggtttt tggctggttg tttcgatttg 120
atgggcttca tgtaaacttt tgacacactt ctatgaccct gatcaagcca tttcaccttc 180
attctctgca tttttaccat tagggagaca aggtatagaa tatttacttt gttctacagg 240
agcgctaggg aaattataca accccattct tctccagtca ctaaggaata taagttcatc 300
tgtcaaagga aaaatatcaa cctaaatatt gctattn 337

<210> 647
<211> 326
<212> DNA
<213> Homo sapiens

<400> 647
ggcaagctgg ggggactttg ttagccatga aacctccagg ggtgggtgtt gagcttgggt 60
ttgtttcgct gtcctccctt ctgctctcag gggagggtgt gggcctgtca aggctgttgt 120
catgtggcag agagaaggcc ccttaggcgc gttaggggcc agaagttggc gctggtgttt 180
gtgcacggct gtgagtaagc gcgtaataaa taaatcagaa cgagatggac ggagaccatg 240
cgctgtgctt tcatcctgct cagcccccag ctgaggaggt ttctgacccc catacccgtc 300
ctgcagcctt cgagcaaatg tggggg 326

<210> 648
<211> 321
<212> DNA
<213> Homo sapiens

<400> 648
tcctgtcaga ttagattctc gtaggagcac aaaccctatt gtgaattgtg catgcaaggc 60
atctaggttg catattcctt atgagaatcc agcaaatgcc tgatgatccg aggtagaatg 120
gtttcatccc caaaccactc caccccagc ctgtgaaaaa actgtgttcc attaaaacca 180
gtccagtcct tggttccaaa atgattgggg gctgcttctc tagcccacag ggagtaataa 240
tccttcagta aggtatagtc cagtgcacca acaaggtgag cttctgggac aaaggaaacc 300

aagatatgca ctttgcagag g 321

<210> 649
<211> 324
<212> DNA
<213> Homo sapiens

<400> 649
cttgtgcaca cagccaagat ttcttcaatg ggtgtgagct agttgagggt taaccttgta 60
ggttgcagag tgtatttgtt tgtttgtttg tttttctctg tgatgcggct agtgctctga 120
ttttgtagga ggtttttcac tgaagctcat agttataaac aaggacatca ctgctaacat 180
tggtaatttt tcctgtgttc agctattatc gtatcaagag cattttattt cagccagttt 240
atgtcactac cttatccata gtttctgtct tatattttta tggaaatgtc tttttctctt 300
attgggggca ctacactttc tttg 324

<210> 650
<211> 324
<212> DNA
<213> Homo sapiens

<400> 650
tagtattctt gtcttagtta gcaatggaaa aagaaaagaa gcaacttggg aggaagaaag 60
gaaggaagga aggaaggaag gacagggcag gccagggagt ccaaaatatc cagatgatgg 120
tgtaagcagg tacttaagtt aggagaggtg aaggaacaat tgaatatagc tcaaggtagt 180
gacactaaaa gagagaattc taataaacat ttccaaatag aaaatatagt taaacattgc 240
gaaaactctg cacactctga aaaaaaagaa gattcttata gaatctctac ctaagagaaa 300
cacacacaca cacacacacg caca 324

<210> 651
<211> 334
<212> DNA
<213> Homo sapiens

<400> 651
ggccgaggcg ggtggatcct tgaggtcagg agttccagac cagcctgtac tctaccctgg 60
gccacagagc aagactatct caaaaaaaaa aaaaaagggg gccccgaaac ctttttttt 120
ttaaaaagga actttttttt tgcccccagg ttgaaaaaaa gggggcagac ccccccccaa 180
gagaatttcc cccggggaaa aaaggggatt ctttttttctc ccccccgggg gagtgggaaa 240
ttaggggccc tgcccccacc ccgaaaaaat ttttttaatt tttaaacacc ggaggggtgt 300
tccaaatggg ggccgggggg tgttgaaccc cctg 334

<210> 652
<211> 338
<212> DNA
<213> Homo sapiens

<400> 652
agcgcctggg gtacaggctg ggcccggcct ctgtgggcac tgacaagagg cccctctggg 60
gcaggcaaag ggcatggttg tgggtggggc tcccctgtga ggacattgag cacagctgtg 120
gcatgcgcat tcagcaggaa atggtcaggg gcatgagctg atctgtctat tgcttctgag 180
ctcacagtgc cctgaggagt acggtgctca aacctcatga gcaaggtgag gcctgtcaag 240
agagccatgt gtgctcagca gacccaggct gcagggcgag aacagggctt cctcagcctg 300
tgatagggac cagtcaggtg caggcaagaa tctgggcc 338

<210> 653
<211> 333
<212> DNA

<213> Homo sapiens

<400> 653
gctgcctgct gcagcctggt ttcttgcttg gactctagta tatatttgct aaatctccca 60
agcctcagtc tcactatttg caaaagtgag ttttaatgct ctttgccctg cttgcctcac 120
aggatcttaa catagacgta agatcaaatg caatagcatg tcaaacaatg tgtaactcca 180
gttatacaaa cattactgta tctcattggg gatacgaagc tctacacact tgaagatggt 240
gaaggaataa aaatctatgt ctcacagtcc agacttggag tacaagtaat aagaagaata 300
aaacttaatc ccttaagtag attcaccata agt 333

<210> 654
<211> 212
<212> DNA
<213> Homo sapiens

<400> 654
gctgcctgct gcagcctggt ttcttgcttg gactctagta tatatttgct aaatctccca 60
agcctcagtc tcactatttg caaaagtgag ttttaatgct ctttgccctg cttgcctcac 120
aggatcttaa catagacgta agatcaaatg caatagcatg tcaaacaatg tgtaactcca 180
gttatacaaa cattactgta tctcattggg ga 212

<210> 655
<211> 332
<212> DNA
<213> Homo sapiens

<400> 655
gcatcatcac gcagatggtg tgctgtaggt aaactagcca gtctcctgtg cccccagcct 60
ccctttttgg gctgttttcc ccatttccat ggaacccttt cctctgcggt cggggcctag 120
gagccatctg tctacaaacc tagtgttgaa gaagaactgc atgatgccct ggttcatcag 180
cctagagagg tgggcagcac cctgcaattc ccgtcctaga ttcatcactg cttttgtaag 240
ctgcttttgc ctgtgcttct cagccttggt gaagtcatct gcattcacag tggcttgcct 300
tcgcccccca ccctggaaaa aagtccttgt gg 332

<210> 656
<211> 362
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(362)
<223> n = A,T,C or G

<400> 656
tatcggctgc tagaagacga anaagggagc agggcttgtg gggaggggac ctgggagtca 60
agatgaaagc tcccacgcgc cgggtgatag tttactggat tgtaacccac agaataaaaa 120
gccacgagcc cacagtgacg cacacgaaca attcgctgag tgaagagtcg gtgtacacgg 180
agctgccctt tctccttcct ggccctggtg ggagaatttt tatcacaagt gggtgatggg 240
ttttgtccag tgcttttcca tgtccgccgg gatggaataa acgtgacgtt tgtctggggg 300
cctgtcagtg tacagcacgt cacggatcat ctgcatgtgt gcccaggacc ggggcagtca 360
cg 362

<210> 657
<211> 350
<212> DNA
<213> Homo sapiens

<400> 657
acgacagagg gggcctcctg agtacctggg attacaggca cccgccacca cgcctggctg 60
acttttgtct ttttagtaga gacggggttt cactatattg gccaggctag tcttgaactc 120
ctgacctcaa gtgatccact tgccttggcc tcccaaagtg ctaggattac aggcatgagc 180
caccacacct agccaggatt cccaatcttt atttgccttg aggctgatgg aaaattgctg 240
gagttctacc tgggattctt aatataaact aacatatata catatacaaa tatatatgtg 300
tgtacatata actgtaaaaa atagtgcggg ccaagcacag tggctcatgt 350

<210> 658
<211> 323
<212> DNA
<213> Homo sapiens

<400> 658
ggtgcacgtg cacccatggt gccattgcca ccggcatgaa tgcacccact cccctgccac 60
tgtgccacct tgccaccatt gccagcgcat agactcacac cagtggccct gcccccatcc 120
catgccacaa ccaccactgg tctggatgtg ggcacaaagg ttggcagccc cacaccggcc 180
agcacccatt cccccacact gaaactgcca tgggtgcaaa tgggcacatg gaccccagtt 240
gccacgtccc cccactgcta gctgccactg ctgctgttgc caatgactgc aaggaagctg 300
gtaatcccag acttatcagt atc 323

<210> 659
<211> 311
<212> DNA
<213> Homo sapiens

<400> 659
tgctctgtca gcctgattct actcctcggg gaggccctcc cttttcttcc aagttctatc 60
acggtcctct tgttcccctc gactgtcttc tgtgcctcct cctctgggct gtagtcacct 120
ggataaaaac ccatctccct cactaggctg ttagctcctg gaaggtaggg acaagagtgg 180
gttggatcat ctctgtgtcc ccagggcctc aggtagggcc agcacacagg agggctttac 240
actgaggatg aaaccctcaa gaggaggccg ggtgcggggg ctcacgcctg taatcccagc 300
actctgggag g 311

<210> 660
<211> 340
<212> DNA
<213> Homo sapiens

<400> 660
ataagtgaga agaagagacc cagagaagtc gccatcagcc ccagggtcac acagcagtgg 60
cagaattcct actagccctg cccctctcct tctcccaagc gaatgtccct aaacacagcc 120
ccagccagcc tgagctgccc cgtcatttcc cgactacaag cggactgggg gcgtggcttc 180
cccttaaaag aagaggaagg aggctcaggc gggaagtgac ttggccctgc agccggcctg 240
ggaggctggg gagggacggg gtttcctgtc acccggtctg gctctttcca ttgagtcacc 300
tgcctcgtct tgggcgtggc caggggagga acagggtgat 340

<210> 661
<211> 315
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(315)
<223> n = A,T,C or G

<400> 661
ggcacccacc accacacctg actaattttt gtatttttag nagagacngn nnttnaccat 60
tttggccang ctgggctgga actcctgacc tcacgggagc cacctgcctc aatctcccaa 120
ggcgctgaca ctccccgcgc cacccactgc gccccgcgga ccaccctcc tcactgggag 180
cgcgcccacc cgggggccg ccaccacctt tcgcccccca ccccacgga atggggagta 240
aagcgggccc ccccgccccc ccaccccgcg aattatcctg gagctcacag agcgcacccg 300
cccgcccccc ccccc 315

<210> 662
<211> 208
<212> DNA
<213> Homo sapiens

<400> 662
ggcgtgtgag cttggttgtc ctaccaaagc cagcgtttcg gctcgcgtgc gccggcctag 60
tttgctcgcg tcctcacgcg ctttgggttt cccggtctca tggccggcct gaccttattt 120
gtgggccgcc tcccgccctc gtcccgcagt gagcagctgg aggaactgtt cagtcaggtg 180
gggccggtga agcagtgctt cgtggtga 208

<210> 663
<211> 319
<212> DNA
<213> Homo sapiens

<400> 663
accaaaagga tttatatgta ctgttgacac cataaaagat tctgacgaag agctggacaa 60
caatcagata gaagtactgg accagccaat caataccaca gacctgcctt tccacattga 120
ctggaatgat gatcttcctc tcaacattga ggtccccaaa atcagcctcc acagcctcat 180
tctcgacttt tcagcagtgt cctttcttga tgtttcttca gtgaggggcc ttaaatcgat 240
tttgcaagaa tttatcagga tcaaggtaga tgtgtatatc gttggaactg atgatgactt 300
cattgagaag cttaaccgg 319

<210> 664
<211> 305
<212> DNA
<213> Homo sapiens

<400> 664
caactcgagg agaaaaccaa atctattgaa ctccattgat gatttggaat gttgatagtc 60
acaagcaaat gtaagaataa gaaagactgc tttctcatga aacttttaa taaaacttct 120
ggaagcattt tcataaccaa atacctggag tacactgcct cactatcctt agtcatgcta 180
gctttctctt ccctgcagta tagatctgcc aattcaaatc tgtatggcac cagggctggc 240
atacgcagaa tgattcaatt agtaatatgg cattgttaaa atattataaa gcgggccagg 300
cacgg 305

<210> 665
<211> 309
<212> DNA
<213> Homo sapiens

<400> 665
catgactgac tcctcttttg gcatgtctta gttaagagtc atctctttag agagagtgtc 60
cttgacaaac aaatctaaag taaacgctcc ctgctatttt cttccataac atcctggcaa 120
tagtggcagg cagggagatg ttcatattac tgagcacggg tttgacttga tattagaata 180
tatatttatt tgctcagctt ttttttttcc atccctaata aagtttaaat taaattgaag 240
attgttgagt ttgaaaatac aggaaggaga gactgtcatg gattacccat tgatagagga 300

atgtccctg 309

<210> 666
<211> 310
<212> DNA
<213> Homo sapiens

<400> 666
attcatcagg gaccaaaacg ttcatgttca ttcagcattc gtgggtctgc tctacccaag 60
aagttttctc actcttcatt ggttctacca agcataagca aatcaaacaa ctcattgaga 120
gaatgtcatc agccaataaa ataagaaact gctcccaggc cctgaatcag cttattaaaa 180
ttgacctctg ggactagctt ctcctaatac ataaaattat aaaaaagact tagacacaga 240
acctcaagtc tgttctacca ggaaatttta cacaagtatt ccagaaatca accaatcatt 300
ctaacccatt 310

<210> 667
<211> 311
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(311)
<223> n = A,T,C or G

<400> 667
tctctctttc tctcccctcc ttccgctgtg gttaaacaca gaagacagtt gcagagttgt 60
aggtcaaagg gttattttaa gcatatgaaa ggacagccca aacagaggat aggctttatg 120
gccaaagttt gtgctcaata aagagtccct ttgagccggg cgccgtggct tacgcctgta 180
atcccagcac tttgggaggc cgaggcgggt ggatcacgag gtcaggagat cgagatcatc 240
ctggctaaca cggtgaaacc ccttctctac taaaaatata aaaaattanc cgggcgtggt 300
ggtgggtgcc t 311

<210> 668
<211> 308
<212> DNA
<213> Homo sapiens

<400> 668
ttagatttcc ctaattatga atgatttgag gagcttttca tgtgcttatt ggccatttgg 60
gatcattttt agagaaattt ctacttaact cttttcttgt taaaaaaaat ttgattgtta 120
ttgcttacta gcggtttaac ctcgtactag gtgctcagtc tctctgggac tgaatcttct 180
catcttaaca gcagggacac tcacctcacg aggttgctgg ggtgcataag atgaggtggt 240
acgcattgat gctcaaccca gtgcctgatt cacgggagaa acctaaaaca tttgttatta 300
ttgtacca 308

<210> 669
<211> 304
<212> DNA
<213> Homo sapiens

<400> 669
tgatccgccc gcctcggcct cccaaagtgc tgggattaca ggcgtgagcc accgcgcccg 60
gcctgtacca acttcttaat gcctcaactg catctctgct tggactttta ctgcaaacaa 120
atatattatg tgatgtttaa aataaaagaa atatgatgtt cagtaataac tggtggaatg 180
agagaatttg gctccatctt ctctaataac aaaggagttc tgctcctaca tctgagcaaa 240
attataacct ttttacataa aacaactgcg aagagtccca gcatgaacac cgcagtctct 300

gggg 304

<210> 670
<211> 150
<212> DNA
<213> Homo sapiens

<400> 670
taactgggca tatttaaaga gaatttaaga catagccaga tgatctcaca tcattttaac 60
gtgcaagata ttcgagtgtg tgcacagtgt atggaaaggt ctgctgactc cttattcaaa 120
ggcttgcatt ccagcccggt ccaccactta 150

<210> 671
<211> 313
<212> DNA
<213> Homo sapiens

<400> 671
cgtgcctata atcctagcta cttgggaggc tgaagtgtga ggaccacttg aactcaggag 60
ttccagcctg cagtgagcta taattacact actgcactcc agtctaggca acagaaggag 120
accctgtgtc tttaaaaaaa gacaaagaaa aaaagaaaga gagtgagaaa gagccaggag 180
acataggttt tagtggctct gtgaggcata aagtcctggg tgaccccatg gatatttcaa 240
agaggtcttc acatttcctt gtatcacaaa atttgatggg tgactaataa aacatgtaca 300
gatgtgcctt aag 313

<210> 672
<211> 307
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(307)
<223> n = A,T,C or G

<400> 672
ggagaaccct tgggggttac atttcaatat ggggcaatta ttggtggcta caagtaggtt 60
cgtgcaatta ttggtggtag gatttgagct ggcctgaacc acaatattca gacactaccc 120
cttctgtctg cccctctcac tatcccaacg gagaagggat tccaaaatct caacacttca 180
ctttcctgta ttaagctgtg aatgcaaaca attgttctag tcattcaatg tcttctgagg 240
aaaaacaatt cagtgcagaa tctaacatac accatgtcta tcatgtaaaa tttatgccac 300
agaaaan 307

<210> 673
<211> 306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(306)
<223> n = A,T,C or G

<400> 673
caggctgtgt gggaaactgg ctgtggtgcg ccggtctgag gtctcaagtc tgacaggggc 60
cactggagcc tccaactcac caatcaacca agtgtgagag gttgctttgg ttgaatggcc 120
atgtgctggg gtctgactgg cccagccaca gggaggctgg catcccctag ctgagtcctg 180

tacccagacc ctccagggca tggagcccat tgtgaggggt ctggtgctga agtggtgggg 240
gaggcccgtg caggcctaca gctttgtcat ctgcaacatt cctctcccca ctttctttaa 300
actttn 306

<210> 674
<211> 313
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

<400> 674
tcctttcctt ttagtcttta tctcattgtt atatgtgatt ataatgttgt catttatgca 60
gttgtatgtt ctattttaaa ccttaaaatt tgttacttac caacttttg aatatgcctg 120
actgaaatga ttcatactgt agcatgtgtg actcagggta gtgaaagggg gtttgttttg 180
aatancaaga tgagcatcat actagtcttc caccacaaaa cattccatgc aacttgagac 240
acagatgaaa cagccaattt tcttcttggc ttgggggtgg ataaagggtg gattgactca 300
tagagggctt acg 313

<210> 675
<211> 310
<212> DNA
<213> Homo sapiens

<400> 675
tactgacata gtgacttagt gatttagtag tgattatgtg acttagtgac atagtgactt 60
agtgattatg tgggtttttc caaacaacaa acatgtgttg catactttct gtgatagcca 120
atgagaattt aaagatacat agagcataac tgttgccccc aagcaacaat gtaataaaga 180
aacaaatata tatgaagaga actgcaaaag actgcaaata tgtactttca tagaagcgtg 240
tgcaaaaggt ttggtgatga tactttaaaa gggaccagag aagtcatagc cagggttgat 300
ttccataagc 310

<210> 676
<211> 313
<212> DNA
<213> Homo sapiens

<400> 676
agagtaagac cagtaagaca ttctcaaaca gttaatggct ttttgattca gagttgcttt 60
cttgggcctt ttctcctttg tcagcttctt tagaaatccc atgctgctcc aagttgttgg 120
gatgtttgaa tatctggaag tgataagaca tgacagaaag tcaaggtata tgactagagc 180
agcagccacc aagggtgagt tcctagtctc cttaagaagt gactggtcac tcaaggtggt 240
agaattaaga gcatcacttt ggggagaact agctacagat gcagctaggg cagatcaagt 300
tgttaatggg ccg 313

<210> 677
<211> 312
<212> DNA
<213> Homo sapiens

<400> 677
actgtactcc agcctggtga cagagcaaca ctccgtctaa aacaacaaca actctaccct 60
ccttttccat tataggcttc tggcctgaaa caggtttgct atatagcaaa acatcaaaaa 120
caaagccaaa agacaaatga caaactgggg caaataggca aacggttaat atgttaatag 180

gtcttatata taaataacat taaattgggt ttggagtttt tattaatatc atggacaacc 240
attctgattt ttgcattgag acagtaaccg taacttaaaa tgaccgtagg attgtctact 300
aactaagagt ga 312

<210> 678
<211> 299
<212> DNA
<213> Homo sapiens

<400> 678
ggcccccccgt gcagccacct gctgcacttg cgcactggga gcgacacgct cgggcataag 60
tagtgccgga aagttagctg ccgagacctg gtggattgct tttcgtttat cagtgcagga 120
aaacagcgct atagtactgc gtcacaacta gcgcagactc cggcagtatt tatgcggtgc 180
ggcttgggaa ctagaatcca cttcctgtct tccgcctcag gctagagggc gagcgcttcg 240
ccgtgggact tcttctgcct ggctccgcct cttgccccgg aagtactcac agcggacgg 299

<210> 679
<211> 311
<212> DNA
<213> Homo sapiens

<400> 679
ggcctctact gggaaccacc ttctgtagga cagtcaccag gccagatcca gaaggcttga 60
ggccctgtgg tccccatcct tgggagaagt cagctccagc accatgaagg gcatcctcgt 120
tgctggtatc actgcagtgc ttgttgcacc tgtagaatct ctgagctgcg tgcagtgtaa 180
ttcatgggaa aaatcctgtg tcaacagcat tgcctctgaa tgtccctcac atgccaacac 240
cagctgtatc agctcctcag ccagctcctc tctagagaca ccagtcagat tataccagaa 300
tatgttctgc t 311

<210> 680
<211> 312
<212> DNA
<213> Homo sapiens

<400> 680
ttccagagta ccactgaggg cccgacttcg atctggtact ccttctccat ttgtgtctct 60
tatattagtg gttccctaac tttgtagcac gttagcgtca cctgggggcc ttttaaaaac 120
cctgatgccc aggtcgtgcc cttatttaat taagtaagaa tgtctgggga ggtggtccct 180
ggggctccag tagcagagtt tgggagctgc cttcctacca cttggccttt cattccctgt 240
gttcccttct gtctacattg gccccctact ggtcccacct cagggtcttg tcctcattcc 300
ccctctgcct gg 312

<210> 681
<211> 304
<212> DNA
<213> Homo sapiens

<400> 681
gatgtcttat tttaagatat tttaaaatct tttacatttg cttaaaattt tacaattgag 60
aaaacatttc tgcataaaca tcatatctca tttccttata ataataattc tgtaagctta 120
tacactgaaa aaaatggtag aaaagtaaca aaaactgctc aaggacccac agaccatttt 180
agaattataa tattaattct ggtcttctaa attcagtgca cattgcatta catgacagtc 240
ctctccatct ttagcaacag agataaaaat gttggcatcg gggccgggcg cggtggctca 300
cgcc 304

<210> 682
<211> 302

<212> DNA
<213> Homo sapiens

<400> 682
aagagttaga aagaaaagag gaaggcggga gaaagcgtgc ggaagcttct gggagtgtaa 60
actttcttgc ccttggccgc tgcgccctct aaagccccgg tgcgctcccc ctaccccagg 120
ttttcggagc ctcccagcct ctcctcgtaa ggcggttccg gccgcctcat ccccgtcctc 180
tgccccaccg cacccaaggt gttggtttcg ggaaggacct acgctgggtc ccccgaggct 240
cctcggttcc tgccgatgct ctggccggac ccgagggggc ggcctgtgga cccgcgttac 300
tt 302

<210> 683
<211> 205
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(205)
<223> n = A,T,C or G

<400> 683
ggcgtgtgag cttggttgtc ctaccaaagc cagcgtttcg gctcgcgtgc gccggcctag 60
tttgctcgcg tcctcacgcg ctttgggttt cccggtctca tggccggcct gaccttattt 120
gtgggccgcc tcccgccctc gtcccgcagt gagcagctgg aggaactgtt cagtcaggtg 180
gggccggtga atcagtgctt cgtgn 205

<210> 684
<211> 312
<212> DNA
<213> Homo sapiens

<400> 684
tacatcattc aaaactttgt gcagattctg aactctgagg agtttcttga cctgcccgtg 60
gacactctgc accacatctt gaagagtgat gacctttacg tgaccgagga ggctcatgtg 120
tttgagaccg tgatgagctg ggtccggcac aagccatcag aacgactctg cttactcccc 180
tatgtcctcg agaacgtgcg cttaccgctt ctggacccgt ggtactttgt ggagacggtg 240
gaagcagatc ctctcatcag gcagtgccca gaggtcttcc cgctgctcca ggaagccagg 300
atgtaccacc tt 312

<210> 685
<211> 162
<212> DNA
<213> Homo sapiens

<400> 685
ggtccccagg aagatgtccg tcagcccctt ggagagctgg ctcacggccc gctgcttcct 60
gcccagactg gataggggac cgcagggact gtggctccac cgcaatccta ccagtgtccg 120
cccagccaga taggggaagg ggccgagcag ggggatgaag gc 162

<210> 686
<211> 292
<212> DNA
<213> Homo sapiens

<400> 686
ctgcatgatt tattgtgcta tctggaaaat caatttttc ttcttgggac cacagaagag 60

tctgtttcaa aacacatttg cacccttaaa gctaacatat tcagtcttac tgcctctggt 120
atctgtaagc agacccattc catgctattt ttaggatcat ttccagaaaa ataatttgtt 180
tcattgtgga gtctgtcaag ctaaatggag ttatttttctt tgtggagttg gatgagtaaa 240
tctagtccta agaaaatgag gatttaaaac atttcctgca gagagctcat ag 292

<210> 687
<211> 293
<212> DNA
<213> Homo sapiens

<400> 687
ggcccccccgt gcagccacct gctgcacttg cgcactggga gcgacacgct cgggcataag 60
tagtgccgga aagttagctg ccgagacctg gtggattgct tttcgtttat cagtgcagga 120
aaacagcgct atagtactgc gtcacaacta gcgcagactc cggcagtatt taggcggtgc 180
ggcttgggaa ctagaatcca cttcctgtct tccgcctcag gctagagggc gagcgcttcg 240
ccgtgggact tcttctgcct ggctccgcct cttgccccgg aagtactcac agc 293

<210> 688
<211> 288
<212> DNA
<213> Homo sapiens

<400> 688
tgttgtgcca aggggttaaa gaaggtccca tctggccctg agtcccagtc ctcaggtgtc 60
cctgaggtgt ctatcatctg tgtggtccac attcttcagt tcacatatgt ccccactgag 120
aaggctgcat cagccatcgt gaccaactct gagtcaggct tgaggaccca ggaatcagtc 180
atttgactgc ttctgtgtcc tgtgggggtg ctgtttgtgg caatgactct ctggacccat 240
cacacagatg tcccctctct gggttcttgt tgtcccctct ggactctc 288

<210> 689
<211> 286
<212> DNA
<213> Homo sapiens

<400> 689
ctgaataata ttattacaga actgaaaaaa aaaacccaaa aatactactg taagtatata 60
aaaacataat tgaatgtgaa attgttctgt tttatgtaaa ttatgtttaa agctaataaa 120
ggggaaatgt ataaaattat aaagaattta aaaaataagg ccgggcacag tggctcacgc 180
ctgtaatccc agcactttgg gaggccgagg cgggcggatc actaggtcag gagatcaaga 240
ccatcctggc taacatggtg aaaccccatc tctactaaaa aaaata 286

<210> 690
<211> 284
<212> DNA
<213> Homo sapiens

<400> 690
gactgcatgc acagggttta cattttcttg tgaatctata atcatttcaa aatgcaggtt 60
tttaaaaaaa gtcgttacac tggaatgaca taaaatgaaa taatgtgaga aaaatagaca 120
agaggattaa accgcttatg cttaataata ctgagactat gtcgcagaga aacttctaag 180
gaatatttttt ggtcaagaga tttgtatcgg tgcggttcaa agatacacga aaatttgatg 240
ttgttgaaac tttcctaaaa atgatacaga ggtaacaata tacg 284

<210> 691
<211> 283
<212> DNA
<213> Homo sapiens

<400> 691
aagaacaggc ggttgctgct catgtagatc tataaatatg tgctgtatgt ctttttgct 60
tttttttaa aaaaaaagaa caactctttt tgcctcttta aattacatac aagcatcgta 120
gtcttggtag aaccacaatt tttgttgttt atttataagg caattgagtg gggcgaaaag 180
agcattattt acctgctgaa ttcaacatct tggaagcacc agggaaaaaa ctaggatcct 240
actattattt ttgcggcaga taatgactct agtttgactt ctg 283

<210> 692
<211> 285
<212> DNA
<213> Homo sapiens

<400> 692
gcctgctacg cagccttaaa acctgaggct ttaagttcct agtattgaga agccccagat 60
ttcatactta tttactctgt tggtttcact ttcctctcca ttttgtgtct cttgggatag 120
gctttgtttt attttcaagc tcagctatgt atataaaaga atgctgggct gggcgcagtg 180
gctcacgcct gtaatcccag cactttggga ggccgagttg ggcggatcat gaggtcagga 240
gttcgagact agcctggtca acatggtgaa aacctgtctc tacta 285

<210> 693
<211> 280
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(280)
<223> n = A,T,C or G

<400> 693
tttgtgatct gtcatggtca tggtatttca gagttggagg atggtctgag ttctgacctg 60
gtgtaggaat cccttctccc aaaactctaa cagtacattc tcaggcttcg tgagctcacg 120
cttaagacac attatttttct gatgctggac agcttcttta aaaaaatgta gattcttaca 180
ttaagctaaa atttatttta tgaaagttca agaattctgg tccaaattgg gatgaggcct 240
atggtgcagg acttccgtga aattttatga gattacaaan 280

<210> 694
<211> 274
<212> DNA
<213> Homo sapiens

<400> 694
tggaaggctg gcacgggggt gagggatgaa atactatcta ttgagttcaa ggtacactac 60
tcgggtgatg gatagagcta acagcccaat cttgaccact atgctataca tgcatgtaac 120
acaactacac ttgtaccccc aaatttatac aatatttttt taaaaaggag aagatagtgt 180
ttagtcagat gattggtcta aggttagagg ggggtgggta tatttaaaca gcacactttt 240
gtacaatctc ttagatatcc taactaaaga aaac 274

<210> 695
<211> 268
<212> DNA
<213> Homo sapiens

<400> 695
ggctgaaata attttaagta gcttgcccca aattacatgg gcaacaaaag gagctgaggt 60
ggcactaggt agagcgcaac tcgtgtcatt cctgcgccac tttgtgacca tatcacaatg 120

tctttcctgc cctaccaaaa taggtattaa taacagccaa tatttatatc attctcttac 180
atgcaaaaca ctgctatgat gcgttatctc acctgacctc cacagtgctg taagataggc 240
accatgattt tactcccttt acacacgg 268

<210> 696
<211> 428
<212> DNA
<213> Homo sapiens

<400> 696
ggcacgagcc cccaccctac cacacattct atagaactgc accaacccca ggaaccgcaa 60
tcagatctct aaggcgggcg ccgggaaaca ggccccgag ctgccagact atgccccaga 120
ctaccagcac aagttcagtt ttgacatcat gcctacggcc cggcccaaga ggaagggcaa 180
gtgtgcccgc aggacccca tccgtgcccc cagcggggtg cagcaggcct cctcggccag 240
ttccctgggg gcctccctcc tggtctggac actggggctg gcggtcactc tccgctgagg 300
acccacggcg ttagcaccca gcactgccac atgtccacca aggaacagaa tttattttct 360
tctttttta acaagcggaa gatctgctgg gttccaggaa aaggctggta caggcttctg 420
gggggtgt 428

<210> 697
<211> 428
<212> DNA
<213> Homo sapiens

<400> 697
ggcacgaggc agcctggcct aacgtggctg cagtctccat tactgggcgg aagcggagcc 60
gggtagcccc tgccgagccc caggaggccc ctgattccac tgctgcagga ggctcagcct 120
cgaagcggat ggcgctggtg ctggaacggg tgtgcagcac tctcctgggc ctggaggaac 180
acctgaatgc cctggaccgg gctgctggtg acggcgactg tggcaccacc cacagccgtg 240
cggccagagc aatccaggag tggctgaagg agggcccacc ccctgccagc cctgcccagc 300
tgctctccaa gttgtctgtt ctgctcctgg agaagatggg aggctcatct ggggcgctct 360
atggcctgtt cctgactgcg gctgcacagc ccctgaaagc caagaccagc ctcccagcct 420
ggtcagag 428

<210> 698
<211> 426
<212> DNA
<213> Homo sapiens

<400> 698
ggcacgaggc agcctggcct aacgtggctg cagtctccat tactgggcgg aagcggagcc 60
gggtagcccc tgccgagccc caggaggccc ctgattccac tgctgcagga ggctcagcct 120
cgaagcggat ggcgctggtg ctggaacggg tgtgcagcac tctcctgggc ctggaggaac 180
acctgaatgc cctggaccgg gctgctggtg acggcgactg tggcaccacc cacagccgtg 240
cggccagagc aatccaggag tggctgaagg agggcccacc ccctgccagc cctgcccagc 300
tgctctccaa gttgtctgtt ctgctcctgg agaagatggg aggctcatct ggggcgctct 360
atggcctgtt cctgactgcg gctgcacagc ccctgaaggc caagaccagc ctcccagcct 420
gggctg 426

<210> 699
<211> 424
<212> DNA
<213> Homo sapiens

<400> 699
tcgattcgcc ggaacccccc tccccaagac tatgaaagtg atgacgactc ttatgaagtg 60
ttggatttaa ctgagtatgc aagaagacac cagtggtgga atcgagtgtt tggccacagt 120

tcgggaccta tggtagaaaa atactcagta gctacccaga ttgtaatggg tggcgttact 180
ggctggtgtg caggatttct gttccagaaa gttggaaaac ttgcagcaac tgcagtaggt 240
ggtggctttc ttcttcttca gattgctagt catagtggct atgtgcagat tgactggaag 300
agagttgaaa aagatgtata taaagcacaa agacagatta agaaacgagc gaacaaagca 360
gcacctgaaa tcaacaattt aattgaagaa gcacagaatt tatcaagcag aacattgtga 420
tatc 424

<210> 700
<211> 414
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(414)
<223> n = A,T,C or G

<400> 700
ggcacgaggc agngaaaaca tctccactct gaagaagaca ctggagagtg actgcaccaa 60
gctcttcagc cagggcattg gaggggagca ggcccaggcc aagtttgaca gctgcctttc 120
tgacttggcc gccgtgtcca acaaattccg agacctcttg caggaagggc tgacggagct 180
caacagcaca gccatcaagc cacaggtgca gccttggatc aacagctttt tctccgtctc 240
ccacaacatc gaggaggaag aattcaatga ctatgaggcc aacgaccctt gggtacaaca 300
gttcatcctt aacctggagc agcaaatggc agagttcaag gccagcctgt ccccggtcat 360
ctacgacagc ctaaccgggc tcatgactaa ccttggtgcc ggcgaggtgg aaag 414

<210> 701
<211> 404
<212> DNA
<213> Homo sapiens

<400> 701
ggcacgagga acgtcctatg tgggactttg gggcaaacac cagtttggct gccccaggag 60
aagaggccgc cctggcccag ctccatccat ctggagagca acacagaccc aggacccccg 120
gcccgcatct ggtcgacaga tgtgtgtctc tatctggcag gcagccccgg ggacccagca 180
gaaattttgc ccctagccta gctctggaat cgacctccag gtatcttgtg aacctgaggc 240
ctcctcctct cacacccaag aaggccccca ggcctgtggt gctgtggtcc tggcccctgc 300
agctgggact ccaggaagcg tgccgaggcc caccatgctg gctggcagct cccaagggca 360
ggtctgtctg agccctcata ctgggagtga gcctgggtag acaa 404

<210> 702
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 702
ctaacggtgg agcttcaggt ctgcattttt ctttctcttt ttttagtggg cacagctatg 60
atatcaaaag gtaggcctgg aaccaagctg atgggagagg gaagacctga actggtcagt 120
ataagaagga aatgagaaat gaacaggaat gaaatggggc gcgagtggtc agagagcaaa 180
naaggaagtg tgggcagtga gtgcctgatg gctgcggagt ttctgtttca aacgataaaa 240
aaaaatttta gaaatggaca caacattgcc cgggcacggt ggctcacacc tgtaatccca 300
gcactttggg aggctgg 317

<210> 703
<211> 398
<212> DNA
<213> Homo sapiens

<400> 703
cgttgctgtc ggtttttcat ttttttctat catgttctta attttcattc cttttctata 60
gcattctatt cttgactcaa gaatgtaaca ttttgtctgc atatattcat ttttttgaag 120
ttttcttatt cctgcatagt ctattgcttc atgtattttt tttgtttttg ctttcttttg 180
gactctgtca tgttggaaac ttttctcaat tgccttcctt aggtaactgc ataatgtgat 240
gtggaagatt caaaagttga ttgccttatc taaattcgac agtttgaaac ttccctttag 300
gctgatctgg gtcagccatt ttgggagagt tctccagaga ccttaagtct tatgtcttgt 360
gctgggcaga caccctcagg gaatagtctt ccattttt 398

<210> 704
<211> 395
<212> DNA
<213> Homo sapiens

<400> 704
cgttgctgtc ggcgaccaga aatctctatc acagatttat tgatgaagaa acgaaggata 60
ccaaaggtcg ttattttata gtggaagctg acataaagga gttcacaact ttgaaagctg 120
acaagaagtt tcacgtgtta ctgaatattt tacgacactg ccggaggcta tcagaggtcc 180
gagggggagg acttactcgt tatgttataa cctgagtccc ttgtgaactt ttgaacatac 240
caacagggta tagagtatag aggctatttc tataattttc ttatatataa ttttttaac 300
ttttaatctt ttttgcttcc ttttttttt ttttaaaaaa agatttttt tttaacaccg 360
ggggtttttt ttttcccccc agcttatttc tagga 395

<210> 705
<211> 395
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(395)
<223> n = A,T,C or G

<400> 705
cgttgctgtc gcaccaggcc aggaggggcc tggcggctag ggactgcttg tctgtgagct 60
tctagacctg ggtgctctac gggtgatgcg aggaccagcg gggaggggca ggctccctgt 120
ccagagtctt ggaggtgggg ccctgggtcg tggctctggc tgtcccggcc ttgagtagct 180
gggatctcat gagtccggga gtccctctgt gtccacatcc tgcagtgctg cgggggctgc 240
ccggccagat gcaggccagg gctggacact tactcctcct agacttagct tgaacagtgg 300
cattaaccat ggtcactccc ataaacccag gctccagacc aggggcccga gagcgaggcc 360
tggggactgg gaagtcccan aaccccgacg tggag 395

<210> 706
<211> 396
<212> DNA
<213> Homo sapiens

<400> 706
cgttgctgtc ggttcaggac cagcttggac aacatgggga aaccccgtct ctactaaaaa 60
tacaaaaaac agccgggtgt ggtggcaggc gcctgtaatc ccagctactt gggagactga 120
ggcaggagaa ttgcttgaac ccaggaggcg gaggttccag tgagccaaga tcgtgccatt 180

gcactccagc ctgggtgaca cagtgagaca ttgtcaaaaa aaaaaaaaaa aaaactgctg 240
ggggcctttt tttgctgaat cccaaacatg gtgaacacct tggtggggtg ggcccaaccc 300
cctttgaaat ggcgggaaaa aatgggcttt tttgggaaaa ttggggagcg tttgtttttt 360
ttggaccctt tttaaagctg aaaaaaccgt tttaac 396

<210> 707
<211> 394
<212> DNA
<213> Homo sapiens

<400> 707
ggcacgagca gctttagagt cccctagaaa gagcatcatc tttgagcctt atccctctgt 60
ggtggacccc actgatccca agactctggc ctttaaccct aagaagaaga attatgagcg 120
gcttcagaaa gctctggata gtgtgatgtc tattcgggag atgacccagg gctcatattt 180
ggaaatcaag aaacagatgg acaagttgga tcccctggcc catcctctcc tgcagtggat 240
catctctagc aacaggtcac acattgtcaa actacctctc agcaggtggg tcccacattg 300
agaactggca ttcgatcctg cgcaatgggc tggtcaatgc atcctacacc aaactgcagg 360
aatgggaaaa ggacagcaca ggatgccctc caag 394

<210> 708
<211> 396
<212> DNA
<213> Homo sapiens

<400> 708
cgttgctgtc ggcagcggcg ctggctttag aaaattactt ttcccactga aacacaccca 60
agtatatgcc cagccttcat gaaagtgaac agagaaacga agcgccttta tgtgggtggc 120
cttagccagg acatttctga ggcagaccta caaaatcagt tcagcagatt tggagaagtt 180
tcggatgtgg agatcatcac acggaaagat gaccaaggaa acccacagaa agtttttgca 240
tatatcaaca tcagtgtagc agaagcggac ctgaaaaaat gtatgtctgt tttaaataaa 300
acaaaatgga aaggtggaac attacaaatt caactagcaa aagaaagctt tctgcacaga 360
ttggcccaag agagagaagc agcaaaagct aagaaa 396

<210> 709
<211> 385
<212> DNA
<213> Homo sapiens

<400> 709
cgttgctgtc ggcagcaaaa aaacagttat gtgagcagtt tcacttggag gttcacatgg 60
ggtggcagca cacttaacat ctaacacacc aggttcattg tgttcataac acttgtcatt 120
tactgtaaca acatttttc ataggagagt aaatagccct tcagcatgct cattcatgaa 180
acagaagagg ctgtacaagt gaagacaagg gctttttatg caagttttga aagataggta 240
tttatttttt ctagagacag gagttttgct ctgttgccca ggctggagtg cagtggtgca 300
atcatagctc attgaagcct cgcactcctg ggctcaagtg gtcctcctgc ctcagcttac 360
tgagtaagga tatgtatttc ttaaa 385

<210> 710
<211> 386
<212> DNA
<213> Homo sapiens

<400> 710
cgttgctgtc ggtgaccaga aatctctatc acagatttat tgatgaagaa acgaaggata 60
ccaaaggtcg ttattttata gtggaagctg acataaagga gttcacaact ttgaaagctg 120
acaagaagtt tcacgtgtta ctgaatattt tacgacactg ccggaggcta tcagaggtcc 180
gaggggggagg acttactcgt tatgttataa cctgagtccc ttgtgaactt ttgaacatac 240

caacagggta tagagtatag aggctatttc tataattttc ttatatataa ttttttaac 300
ttttaatctt ttttgtttcc tttttttttt ttttaaaaaa agattttgtt tttgccccca 360
ggggtttttt ttttcccccc agctta 386

<210> 711
<211> 363
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(363)
<223> n = A,T,C or G

<400> 711
tcnagtgcgc gggaggctgg tgtgtctgca tatgtggtca actctctgga tgttaacacc 60
ttgctggctg gccaccaagt gaagataaac tggcctgggt cacaagtctt ttttctgtgt 120
ctagttgccc aaggtggaca catctctgcc atgtctcagg accagtaaac tcaagctatg 180
cttggaagga cagaattgat caagatggaa tgactcctga gaggagacag tagtgatatt 240
tctgctccac tgctatttat ttttctggct tcaaggttca gattcaacca tggcaggaga 300
gaaagtcctt agcagnttct tattttatat ttttttgggg cctatgcacc cctcattaat 360
aag 363

<210> 712
<211> 361
<212> DNA
<213> Homo sapiens

<400> 712
tgaacccggg gggggggttt gcagtgagcc aatattgtgc cactgtactc cagcctgagc 60
aacagcgcga gagtcgttct caaaaaaaaa aaaaaaaaag gggggggttt aacccccctgg 120
tatcccccac cttttggggg gggggggggat tctcattttt tgccgggaaa aaatttccag 180
gttgggattt tcttaagttt ggaaaggttg ccccttgggc tttaataacc tttaaaggtt 240
aataaaaagg gggggttccc cccgggaatc ccccacattt tgggggggcc gggggggggg 300
gaccaaaggc cagaatttta aacccccccg gcccaacata ggaaaccctt gttttattaa 360
a 361

<210> 713
<211> 390
<212> DNA
<213> Homo sapiens

<400> 713
ggcacgaggt tgggtagaga cggtgttttc accgtgttag ccaggatggt cttgatctcc 60
tgacctcgtg atccgccctc ccgcctcggc atctcaaagt gctgggatta caggcgtgag 120
ccacggcgcc cggacttcct tctttttaa gcaaagcctg ttagaatggc ttggatctcg 180
aggtggcgtc ttacccgacc tccgagggct ctgcagccgc tgcgggagaa tgaccctgtc 240
ggtatttttg aggctgcttt gagcgcggcc ccctgccaag tacccggcca tcaaggccct 300
gatgcggcca gacccgcgcc tcaagtgggc ggtgctggtg ctggtgctgg tgcagatgct 360
ggcctgctgg ctggtgcgcg ggctggcctg 390

<210> 714
<211> 382
<212> DNA
<213> Homo sapiens

<400> 714

cgttgctgtc ggcctattac aagcacattc tttgattgag tcattggata taaacttact 60
aaatgcataa aaagcagtca atttacgaaa cttctgagtt ggtgggacac tgttgattaa 120
taatgtactg tatgaattaa gagatgcttt aactttgatt ttacatttta taggtaacat 180
gtggacatta tagtatcaaa catattggca ttatgtcggc atactagaaa cattgtattt 240
cctgtgcttt taaagtatac tctttacatg atctgagaga ggattcaagg tgatagaaat 300
agctgagggg aaaaggggga acattttgct atgaagattg gccttatggt gatgggttaa 360
ttacacatta tgatgttaga ag 382

<210> 715
<211> 351
<212> DNA
<213> Homo sapiens

<400> 715
tacggctgcc agaagacgac ggaaggggtg cagtggcacg atcttggctc actgcaacct 60
ccgcctcccg agttcaagag attctccgcc ctcagccccc tgagcagctg ggattacagg 120
cacctgccac caagcccagc taatttttgt atttttagta gagacggcgg tcaactcctg 180
gaactctgaa tgaagcgaaa atgcgtaatt tgggataata tcaaacctgg cgtggtgagg 240
aaagcccacc acaagcccgc ccctggaatt tctccctcct ataaacccag gcaacataaa 300
taagtgtggc tgggcgcccg ctcctcccaa aaactcttgc tgaaggacgc c 351

<210> 716
<211> 378
<212> DNA
<213> Homo sapiens

<400> 716
cgttgctgtc ggagacttcc caggaaggtc cagcgccctc tcagccttcg tactcagaac 60
agccgatgat gggcctcagt aacctgagcc ccggtcctgg ccccagccag gccgtgcctc 120
tcccagaggg gctgctccgc cagcggtaca gagaggagaa gaccctggaa gagcggcggt 180
gggagaggct ggagttcctt cagaggaaca aagcattcct gcggcatgtg aggaggagac 240
accgcgatca catggccccc tatgctgttg ggagggaagc cagaatctcc ccattaggtg 300
acagaagtca gaatcgattc cgatgtgaat gtcgatactg ccagagccac aggccgaatc 360
tttctgggat ccctgggg 378

<210> 717
<211> 381
<212> DNA
<213> Homo sapiens

<400> 717
cgttgctgtc gggacatggc acctttctgc tgtgcctgga aaccatttac cagaaagtga 60
cgggcaagga gctgagatac gagggcctga tgggcaaacc cagcatcctc acttaccagt 120
atgccgagga cctgatcagg cgacaggccg agaggcgggg ctgggccgcc cccatccgga 180
agctctatgc tgtgggtgat aaccctatgt ctgacgtata cggcgccaac ctgttccacc 240
agtacctgca gaaggcaacg catgatggcg cgccagaact aggggccggg ggcacacggc 300
agcaacagcc ctcagcgagc cagagctgca tctccatcct ggtgtgtaca ggcgtctaca 360
atcccaggag cccacagtcc a 381

<210> 718
<211> 344
<212> DNA
<213> Homo sapiens

<400> 718
ttaaggaacg gaagttaaga atgtaacaca caaagtaaaa agacggcaga gttgactgct 60
aagcctaata cttttaggct tctcatgtta ccttgcttaa aattgctgta taatttcaaa 120

aatgccccac ttcagtttta aaaagtaaaa taactattta atttatttat agaattaaaa 180
gaaaaaaata gtaaatctgt gtttttgcct agaattagtc cttagacact acatcaaaaa 240
acaaatcttg gccaggcatg gtggctcaca cctgtaatcc caacattttg ggacaccaag 300
gcaggcggat aacctgagat caggaattca tgacccagct tgcg 344

<210> 719
<211> 376
<212> DNA
<213> Homo sapiens

<400> 719
cgttgctgtc gcaaactttg gggaaaagga aaggaaacac aggagaagtt ttcagcagtt 60
gccccgagct gttttgtgtg taatgaagtg gttctttgat taaggagctc tatttcttat 120
ttaactgata tcccactgcc ccactccaca aaataggaaa atgaagaaat ctttctctct 180
gacttgttta catcatttca cggaaacaca tctttgtttg taatgcagta ttctttctct 240
gtgtttgaca gagatgggga ggggcagagg aatttaagag gttttaaaag aaatgttatg 300
tttcttatga cttgtttcca ctcctcgtac aatgctattc ttaggtttct acgaaaccta 360
atgttagaac cgcatc 376

<210> 720
<211> 349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(349)
<223> n = A,T,C or G

<400> 720
nttaatctgg gtgccgggga caagaagcag aggaaaaacc acactatcaa gctgcaagag 60
ttggcactgc tgctgcccat agccctgaag acggggacca agaagctcac aaaggtacag 120
ggactagagg agaggggcca gatttgggac gcaggtcttt aaatagcagc agatgggtca 180
ccctctcctg ggaaacctgg acagatcctt tcagtggcag cattcatatg ggaatggggc 240
tactctgaac gggaattttc gggagtctgt gaacccataa ctaggtgcct gggggatcct 300
ttttttggaa aggagagagg agaaaccggg ctgggggaaa aaagagatn 349

<210> 721
<211> 375
<212> DNA
<213> Homo sapiens

<400> 721
cgttgctgtc ggttagtacc aagctaagag tttacttaca gatgacagca agcagatgct 60
ctagtaattc gtcagacatt gcagggatat tgtgtagtca gatattaccc tcttgtggaa 120
agaactacct cacatcatta tttatttccc ttctgttacc aacagccaag gaattactta 180
gtgtggctcc ctgcatcaat actgggatat gcttaaacaa gggaatgcca taagagttcc 240
caattgcctc gtcatagcct gggccataga tttttgttac tgctaatctt gcttcttaaa 300
gttcacaccc agtgcaaaaa acccaatcag caaactaacc ccaaaatcca atatatttag 360
aaatgtaagt gttaa 375

<210> 722
<211> 341
<212> DNA
<213> Homo sapiens

<400> 722

acaaagagga attagtgaat gaataaatga aagtctatat ggtaaagctg gggcatggta 60
ggactagtcc tttagaagtc tcctgattct tagtttactg ctctttgcaa tccacagcat 120
taacccccac atatatatgc cccaggtgta gcctgactca taacatcact aaccctacta 180
ccaatggtga tgtgtaagca ctttgtgctg ggttaaagct tcaaactttt cttattgaga 240
ttagatgatc taagcagtag agtcccttaa atcaaggttc agggccaggc gcggtggctc 300
acgcctgtaa ttccagcact ttatgaggcc gaggtggtcg g 341

<210> 723
<211> 371
<212> DNA
<213> Homo sapiens

<400> 723
cgttgctgtc gggctctcta gctcctccct gagtgctggt gttctttgca gtgattattt 60
tgtagccatt tacctgtgat tcaggggcca gggtgaggcc caagagtggt ggtcgggcag 120
tggacaggcg ggccaggctg aaagacctct gacaaggtgc tgtgtggggt gcaggtgtgg 180
ccggtgtgga tggcatgctg ggtcgggtgc cacagagtgt ggtggacgag gaggacagtg 240
gtctgcagag caccctggag gcatcgctgg agctacgggg cctggcccgc gttgctgata 300
acgcccagca gcagtatgtg cgctcacgcc cggcgccctc gcctgagtcc atcaagaggg 360
ccaaggagat g 371

<210> 724
<211> 333
<212> DNA
<213> Homo sapiens

<400> 724
catgggggga aaagacctct ctaatgttat gtagaaagag aaggagggag tgccccttct 60
agcgtggatg cctttggttc ccagatctgg atttgagggg ctggctctat ctcttaagaa 120
gacatttacc tagcattggt aatggagatg gggccttaat agggctaggg aggcacaccc 180
aactccagac acagctctct gctgttcccc ttcccagtgc acacagtccc aattcccact 240
ccagaaaatt ttttaaaaac atatcttaaa aaaaccccaa agagccaagc agaccctcag 300
cttcaaggga tctcctcatt ctctctctct ctc 333

<210> 725
<211> 334
<212> DNA
<213> Homo sapiens

<400> 725
acgtcctact gtaccagcaa taagacaata tgaataccct gcaaccttaa ggtgcttgaa 60
gtaagtaata cgctctcaat gagacaaaag caacaatttg gaaacaaaag tggaaattaa 120
caatgccact ggtttctgtt taaagaattt atgtatcggg ctttcattgt gaataaactc 180
agtaagcagc tactcaaatg atgtgattac atggtctagg aatatactct tggtctccaa 240
aatgacttct ctatgactcc tggtagtata tgaaacttag taattaacac tttctaccat 300
ttaaatcaaa taaatatgtt tatctctgtg aaag 334

<210> 726
<211> 334
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(334)
<223> n = A,T,C or G

<400> 726
aagctcggaa aaagaaatag aagagaaggg ttatgatgga tttccttgat ttattcagat 60
tgtgaaaacc taacagataa atttccacaa aattaaagaa aattcaaata ttagatgggt 120
gaagaagtcc ctccaatttt aaataccagt aactcatcat ttacctgaga ctagaaaata 180
actagatatg cttaagatgc ttctccattc ttgttggtct ccgggctaca ttctttctga 240
taggtaccta gcgtgtatat tacacttcac atgtgcatgg catactgcag tgaatcaagc 300
aatctgggag ggaaaccttg ccagaggaga aatn 334

<210> 727
<211> 328
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 727
tcattttatg ctgccttctt agatgcaagt attcattcat cccattattt actcaatcaa 60
tgaatattta ctgaatcctt tctacatacc agacattgaa ccagacatgg ctcaatgagg 120
acttggtgta gcccttgcgg gagcttacag tctcagagag ggaaacagtc atgtaaaaat 180
gagtcgtggt aaaatactac aagtgtttag gatactaatg aagtgagaaa aaatagatca 240
gatggtcttg aattctggaa ggtgagctca ccagatagtt gaattccaaa tacatgcaat 300
gttatggtgt gtgtgtgtgt gtgtttgn 328

<210> 728
<211> 329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(329)
<223> n = A,T,C or G

<400> 728
gcaatgagtc ttaagaaggt aacagcctaa aaccatctca gatgaaatgg agctgctcag 60
agacttttgg gagctctcag acctggtgga gacctctatc ccaagtcaaa atgcaacact 120
cacttcaaac agaaatatcc ctacaagaca ttaattcaca atttcaacgc tttatgacct 180
cccactatat gccaagcact tttaaagact tcagaggaat ataaaaatga atcatatttc 240
atcttccatc tgctcaaaat tctctttggg tgggcagtgt ggagcagcag aaaagtacgt 300
tatttgttac aggggaggtg tggatgaan 329

<210> 729
<211> 164
<212> DNA
<213> Homo sapiens

<400> 729
ggcagacgca ggggtcggcg ccgggtgaga gcgtgcggcc gggtgagagc gtgcggccgg 60
attcaccaca acatggcaaa tctttttata aggaaaatgg tgaaccctct gctctatctc 120
agtcgtcaca cggggaagcc tcgagccctc tccacatttc tatt 164

<210> 730
<211> 320
<212> DNA

<213> Homo sapiens

<400> 730
tcaggtggga ggatcgtttg agtctgggag gttgaggctg cagtgagcca taatcatgcc 60
actgcactcc agcctggaca acagagcaag accctatctc aaaaataata aaatttaaat 120
gttgtataga gatgtatgta aatacataga aaaaaactgg aagaatacat ttaaatagtt 180
aatagtgttc aacaattttt taccaggcac ctactattgg taggtgagaa tatattggtg 240
aataaaaacc cattgatctt gccctcatgg atcatatgtg gacaagatca gcctttctca 300
actggagttc tgagagattt 320

<210> 731
<211> 369
<212> DNA
<213> Homo sapiens

<400> 731
ggagatgatt tggacaaatg gggttttcaa ctttgatgtg aagggaaaag gggaagtagg 60
ggataccccc tcagctgtca ggaactgggc acctacatgg gaagccctag atctgcaaat 120
gctttgagct ataacaagtt tgaaaagctg gatgtgagac agcactctaa tttaagggga 180
tgataaaggc tgggatccta attctcaccc caaacccccaa tagcatagtt ctatttggcc 240
aatccaaaaa gcacgtgtat cttggaactg acctgtagac tcccatggtc tgaatgaagt 300
gatatgtccc ctaaagcttt ctctggctgg ccctaagaca attaactagt aagatagcat 360
accagattt 369

<210> 732
<211> 309
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(309)
<223> n = A,T,C or G

<400> 732
ctctaggagc ttccaggtca cttctaactg cctgcagctc tcccttctcg gaaccctgct 60
gcattcaaag aggagccgtg ctatttagct ctttttttctt gtctttttttt ttttttttaa 120
aacagggttt ccctttgccc cccaggtggg agagacattn ccaatgaaat tctaagcagg 180
ctcccttccc tcttgcgtta ccccaaatcc taattgtata cctaaaaaga gtgggggcat 240
aatggggcgg ccccacaagg ccaggggttt tacagtacac ttggtgatag aactttctac 300
ccccaccta 309

<210> 733
<211> 461
<212> DNA
<213> Homo sapiens

<400> 733
gtcattgtct ttttgattat cccatcgatt ccaattccgt tgctgtcggt ttcccggagg 60
aaatgactat tacctgacga tcacagggcc ttcgcacccc ttcctgtcag gggccgagac 120
attccataca ccaagcttgg gtgatgagga atttgaaatc ccacctatct ccttggattc 180
tgatccctca ttggctgtct cagatgtggt tggccacttt gatgacctgg cagacccttc 240
ctcttcacag gatggcagtt tttcagccca gtatggggtc cagacattgg acatgcctgt 300
gggcatgacc catggcttga tggagcaggg cggtgggctc ctgagtgggg gcttgaccat 360
ggacttggac cactctatag gaactcagta tagtgccaac ccacctgtta caattgatgt 420
accaatgaca gacatgacat ctggcttgat ggggcatagc c 461

<210> 734
<211> 449
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(449)
<223> n = A,T,C or G

<400> 734
ggagaaggct tttngatatc cgcaggatac cacttgcttg ctcgtttggc cgttagctcc 60
aaacattcta cacgttgata gaaaactacg aagagggacg cttatacttg ccatcatatt 120
ttactctaaa cccctgctac tgggtcattt tttgattatg caggtaaatc ccaaagcttc 180
cacaggctgc tctagtattc tatcgggcat tttattccaa aacttttttt ttacttttta 240
ctatatgcct agcagaggtc taaaaccttt atacacatta actgacttaa tcttgaccag 300
atctgcggat tcagtacatt ttactcccat tctggagctt acgtaaatga aacactgaca 360
cgctgatagt catgtgttag agtcacgatt tgaacctacg taagcttggc tgcaaaaact 420
gtgttctcaa atgtctgtac ttttatatg 449

<210> 735
<211> 450
<212> DNA
<213> Homo sapiens

<400> 735
tgacgagcac atggactttc tgcgcgatgc ccttcaggac catgcgtgct acttggtgca 60
gaagaccacc gaagggacac ccacctgcat tgtgagctct atggctttga aaattacgac 120
acaattcttt tacgactcct ccccttcacc atttgtgtcc acattaccat tgctactgtc 180
tggcatagca gtccttttta taaatctacc ctaaggctcc ttccatcttg tactgtttcc 240
tttctccctc ccatctgctc cagaagaaaa aaatatatat atactacaga atccaccctt 300
gcctcacttt atgatgacgg cattccctat ggaagcccta tgctcctttt cacacacaca 360
aaaaatggaa gtaatattat tttctttgaa aatcatcaat cctcctacta tgacatatgg 420
aaagcaaaca gctgtaccca cgaaaggtac 450

<210> 736
<211> 416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(416)
<223> n = A,T,C or G

<400> 736
ctatcttaga acaagttaaa tagtatatgt acttgtaata acttgtgact agatatgtta 60
gttttgtcta ttaatttttc tgttaaaaag aatatgcatt gaaatgagat ggaaaacaaa 120
atgaaaagtg tttaaaaaat taaatatttt agaaggatca atatcctaag ggttgtgggt 180
aattctttcc tactttctaa aacttcagat tcctttcact cacttaaggt tgtactacca 240
ttaatgcaat gttttctggg agtgcaagat ttgcanatga attaataaca gctagaagcc 300
tcactatttg cacttttata acattctttg cttgtatcat tacaagggta aattatatag 360
taataggtgg aaaaaagtat caaaaatcag tgaaaaccac atgggattca tatggn 416

<210> 737
<211> 412
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(412)
<223> n = A,T,C or G

<400> 737
aagttgcctc agaatgagac acactctttg acttcacatg caacagaaag gcacagtttt 60
atttcaaaca aagcagtgtt ttgctgtaac accgttaaaa actggaaagg aaaactcaat 120
caaaccaaaa actagatgct taggaataaa tggtagaatt cttacaaaac caccacgctt 180
caattcaatc taaatcaatt caacaaatct gtgctgaaag tataacattt agttttctta 240
gacaccanat gaacaataca aaatccctca agggacttag aacattcaag ttttctatat 300
ctgtggttct aagtctgtta ccaacttcca ggactctgct tctttccctc tgcccattaa 360
caatgcgngt gttaaagtga cttcctacca ctatagtttt tacagctgat tc 412

<210> 738
<211> 441
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(441)
<223> n = A,T,C or G

<400> 738
tcgatctcaa ttccgttgct gtcggcggac gccttccttc tgaagcgagc caccgagaag 60
ataagcgagg acctcagggc cacactgaac gccttcctgt accgcacggg ccagcacagc 120
aacaagttca tgctggtcct ggccagcaac caaccagagc agttcgactg ggccatcaat 180
gaccgcatca atgagatggt ccacttcgac ctgccagggc aggaggaacg ggagcgcctg 240
gtgagaatgt attttgacaa gtatgttctt aagccggcca cagaaggaaa gcagcgcctg 300
aagctggccc agtttgacta cgggaggaag tgctcggagg tcgctcggct gacggagggc 360
atgtcgggcc gggagatcgc tcagctggcc gtgtcctggc aggccacggc gtatgcctcc 420
gaggacggng tcctgaccga g 441

<210> 739
<211> 403
<212> DNA
<213> Homo sapiens

<400> 739
ggaagcgtcg gcgacgcatc gcgcgatggc gcgggcggga cagtgcttgt gaaactgaac 60
acaacaaaag tatggatatg ggaaaccaac atccttctat tagtaggctt caggaaatcc 120
aaaaggaagt aaaaagtgta gaacagcaag ttatcggctt cagtggtctg tcagatgaca 180
agaattacaa gaaactggag aggattctaa caaaacagct ttttgaaata gactctgtag 240
atactgaagg aaaaggagat attcagcaag ctaggaaagc ggcagcacag gagacagaac 300
gtcttctcaa agagttggag cagaatgcaa accacccaca ccggattgaa atacagaaca 360
tttttgagga agcccagtcc ctcgtgagag agaaaattgt gcc 403

<210> 740
<211> 430
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(430)
<223> n = A,T,C or G

<400> 740
ccatcgattc gaattccgtt gctgtcgccc agaagggtct gcatgggcca tgagcgggca 60
ctcccaatac agcttaccgt acaggctttg gacatgccgg aggaggccat cgagactttg 120
ctgtgctacc tggagctgca cccacaccac tggctggagc tgctggcgac cacctatacc 180
cattgccgtc tgaactgccc tgggggccct gcccagctcc aggccctggc ccacaggtgt 240
ccccctttgg ctgtgtgctt ggcccagcag ctgcctgagg acccagggca aggcagcagc 300
tccgtggagt ttgacatggt caagctggtg gactccatgg gctgggagct ggcctctgtg 360
cggcaggctc tctgccagct gcagtgggac cacgagccca ngacaggtgt gcggcgtggg 420
acaagggtgc 430

<210> 741
<211> 437
<212> DNA
<213> Homo sapiens

<400> 741
gcaggatccc atcgattcta aatccgttgc tgtcgcacag agccaactaa cgacagctat 60
ggattatttg cggttgtgat gcatagtggc attacaatta gtagtgggca ttacactgct 120
tctgttaaag tcactgacct taacagttta gaactagata aaggaaattt tgtggttgac 180
caaatgtgtg aaataggtaa gccagaacca ttgaatgagg aggaagcaag gggtgtggtt 240
gagaattata atgatgaaga agtgtcaatt agagttggtg gaaatacaca gccaagtaaa 300
gttttgaaca aaaaaaatgt agaagctatt ggacttcttg gaggacaaaa gagcaaagca 360
gattatgagc tatacaacaa agcctctaat cctgataagg ttgctagtac agcgtttgct 420
gaaaatagaa attctgg 437

<210> 742
<211> 428
<212> DNA
<213> Homo sapiens

<400> 742
cgttgctgtc gctgtcacag acacatattt ggatttgtga ttttattctc ctggatggac 60
aattgtgatg gatttttttgg gttccgggct tcaagctttg caatctcatc ttctttgccc 120
ttcctcttgc cataatggaa gaggcgctgc taatttgggt tccatccttt cctgctttca 180
cagactgccc tgtgatttcc taaaacattt ccattagttt gtttgaattc tctgattttc 240
ttcccttagg gccctccaca ggcctctgtg ctagtgcctt gaatgatggc aagcgtacaa 300
aaaatatttt ttttcttttt aaaaacgttt ttgttccggc cccccatgct tgtgagccca 360
attcatctct ctcgcacgtt atttccaccc ctctaccccc tcagctttcc agcgtgctca 420
tcaggggg 428

<210> 743
<211> 424
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(424)
<223> n = A,T,C or G

<400> 743
cgagtcgtac aattttgtaa nganccggag cccacgattc gaaggtcctt gctttcggga 60
agaatattct acttatcaca ccagagcttc caccgacagg gggggggacg taacacacct 120
tggttccccc ccggctttcc ttccccttct ctcccgcctt ctccttaatc ataccaaaag 180

cgcctcagct ctgattggct ggagctctgt gctatctcag ccaatcacaa gccgggctgt 240
gctcctacac catccgaaga gcgaatcgtg cagagaccgt gtctacgatt ggcctctccc 300
tgacaaggat ttaattatga atttttcttt atggcgtggg agaggccaca gcccggactc 360
catcgactcc cccggctctt agactaaaat catgcccaag tgcaaacaac gaagacgaaa 420
gcta 424

<210> 744
<211> 429
<212> DNA
<213> Homo sapiens

<400> 744
cccatcgatt cgaattccga tgctgtcggt ggctctgtat ggccagtaac tgggactcga 60
gctttcagat tctcaactag ccttggcaaa acagctgtag gtggcctccc tgacaacaga 120
cactcagacc tccccaccct ggctctcctt gcatttcccc atgctcccca ccccctggca 180
aaaggctggc catgctctgt tcccagcagc cgcgcaggtt tccccactgg ctgcaatggc 240
cctaccaaaa gccatgttgc atatccgttg taagcacgtg ccctgtgccc tgtccccatt 300
ccttatgccc tatgaggcca agctggtgtc tctaggaggg cccacacagg caccctggat 360
cccccagaga gtaaattggt gtgctcaggc cgcaggctga ctcataggta gggcagtggg 420
ctctgcagg 429

<210> 745
<211> 423
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(423)
<223> n = A,T,C or G

<400> 745
cgttgctgtc gggctgcggc cggtttggcc cttctttgta ggagagtttc atccgccctg 60
aaatcttgcc gatcgttaat aactcctcag gtccctgcct gcacagggat ttttcttatt 120
ttgttgccta aaagcacacc aaatgtgaca tcctttcacc aatatagatt acttcatacc 180
acattgtcaa ggaaaggact ataagaattt tttgatgacc caaaaaactg ggggcaagaa 240
aaagtaaaat ctggagcagc atggacctgt cagcaactaa ggaacaaaag taatgaagat 300
ttacacaaac tttggtatgt cttactgaaa gaaagaaaca tgcttctaac cctagagcag 360
gaggccaagc ggcagagatt gccaatgcca agtccagagc ggttagataa ggtagtagat 420
tcn 423

<210> 746
<211> 252
<212> DNA
<213> Homo sapiens

<400> 746
aaataaaata aaataaaata aaataaaata aagataaatc aggcagttca gtaactgaat 60
tctccccatc acaaaaagat ttttcatttt acaagtattc atcaactaca attgaactgt 120
aggaaaacac tttaggtagt gttttccccc gggttatacc tctttttcta ggttaacttt 180
tactggtcct aagcatttgg cacttcaaaa ataccatttt atggtgttgg gaaaactggc 240
ttaccgcatg ca 252

<210> 747
<211> 391
<212> DNA
<213> Homo sapiens

<400> 747
cttgtgtggt gcactgtgct cctgtcttta gggacccgtg aagacaaact tcttccttca 60
tgatagtcat ttccatgcgt ctgtgtccat actatctctg gttaaaacaa atcccaggta 120
cattttaaaa cacggatggt ggtagatctt gcatggaatg gtgatctagt cacatatatt 180
ttatatactc tggaaatgat gcaaaaattg gctacaagaa agcttatatc tctccttgta 240
atcttctata acaattttaa actaactttt tctacataca gcatgttgtt tcctagatga 300
ggcgatgaaa ttctttatgc agcaagagtt ttccagtata tttcaaaata ccttattgtg 360
aatgtttttg aaatgtgtaa ttactatctg a 391

<210> 748
<211> 391
<212> DNA
<213> Homo sapiens

<400> 748
ctcaacacac ccaggttttt ttgttctctc tttctctctg gcctcaattc catgccttac 60
tacttgattg ttgtatgcta ggattgaggg aatatgcatg caaatactag acaaagcact 120
tgagggaggc cttctcccac agtactggtg gctgtgtaat agatgttctc aattaccaag 180
tgcttaaact gagccctatg tacttaggca gcctgtttag agttcttacc cacttgccaa 240
tgacacttga ctgctgaatc caaatatgaa aaaaactata gatagattca aggaccaaaa 300
ttatggatat gccactgaaa atgtatggta gagtaggccg ggcacagagg ctcatgcctg 360
taatcccagc acttttggag gctgaggcgg g 391

<210> 749
<211> 258
<212> DNA
<213> Homo sapiens

<400> 749
ttagatgatg gatatctaga ggtgtattat atcattggct ctattttgta tgtttgaagt 60
ttccatagta taaaacttag gaaagttaat ttaaacagac aaatacccca tcatgaaaat 120
ggataatcaa aaggaactct tgataatgaa agaactaaaa gtggccagat gttttcaaat 180
gcttagcttt actactaatt cttcaatgtt agtttacaa acaaagatga tacctcttgc 240
tgggcactgt ggctcact 258

<210> 750
<211> 390
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(390)
<223> n = A,T,C or G

<400> 750
taataactat aatttattca gtacctttt acataatgga ccttattctt aatgctttat 60
gtacattaac ccatctgacc ctcatgacga attacctata gcttattatg cccatttttc 120
agataaaaat gaggttcatg aacatatata ttttgcacac atgtattttt aataatttca 180
ggccaggcgt gatggctcat gcctgtaatc ccaacacttt gggaggccga ggcagatgga 240
tcatctgagg tcaggagttc gagactagcc tggccagcat ggcgaaaccc tgtctactaa 300
aaatacaaaa aaaaaattaa ccgggcatgg tggtgggcgc ctgtaatccc acctattcgg 360
gaggctgagg cgggagaatc gcttataccn 390

<210> 751
<211> 386

<212> DNA
<213> Homo sapiens

<400> 751
aataaataac ttatgtatcg tcggaggttt ttactgcgga gagagctgta cgtaattggt 60
gcaccacaca gatgctccct ccaggactga aggacttacc cctccagctg ctgggattat 120
agttggctga cactctccag cagctggcag tttccaggaa ctgcctgtgg ctgaagagaa 180
ccaccttact cagagttcta ccctcctcct aggggcagct gcatccaatg actggcctat 240
gtggaggtat aaatccatct tgccaatatt catacttatt tacataattt acgatattca 300
tacttaaaga ttctgtgccc ttacccaact caggataggc taaaagaact agcccagctt 360
ggccgggtgc actggctcac gcctgt 386

<210> 752
<211> 414
<212> DNA
<213> Homo sapiens

<400> 752
ggcgttggtg tcgaaaccgt tgagtttcta aatatttatt tattctaaca aaaagcaatg 60
agtacggggg gatgacacat ttaatgaaca caatttttatt ttttttctgt aactgtgctt 120
gttgaatgtc aatcatattt aaagggaatg actttgaagt aaaacctttt ttcttgctac 180
tgaaaaaaat ggagttgttt tgggtggtaa agtgttaagg aatagggaca gctggtcaca 240
caaggaactc ttgaaggcca catgtgaaaa cctgtcactt gcacagaggc cagtcccact 300
aaggtgacca gagtgggctc caagcacaaa ctgccattgg ctatagatgg gactgtgtcc 360
ccccaaaatt catgtgttgg agccttaacc ctcaatgtga tggtatttga gatg 414

<210> 753
<211> 416
<212> DNA
<213> Homo sapiens

<400> 753
cgctgctgtc gacttcgtga aaattattta ggaggaagag ccggaaggaa aaccaagtga 60
tgcataaagt tcggagagtt cagatgatga aaaagcctgg gttgaagagg tcaggaagca 120
acgcagactc ctccagcagg aggaaaaagt gaagcggcag gaacgactca aggaggacca 180
gcagacagtc ctaaagcccc agttttatga gatcaaagca ggagaagaat ttagaagctt 240
caaagattct gccacaaagc aaaaactgag gaacaaaacc cttgaagatc gtttgaaaat 300
tgaagcaaaa aatgggacat tgagtgtatt cgacaccaac gttgggagca aacaattgac 360
cttcacgtta aagaggtctg aaccgcacaa taaagcatca gggaggctgg gaaact 416

<210> 754
<211> 388
<212> DNA
<213> Homo sapiens

<400> 754
tgcaatgttt tgtagggcca gaattatttc acacacataa gtatgatttt ccccaaccag 60
accacaagct cttcaaggtt aacaacaccc tcgcccaacc ccctcccccc caaacaattc 120
ttctgctctc ctagagcaga ctttgatcta aattggatct aaattgactc gaaatgtcag 180
gaaaaagaga ttaatgcaca aggtcccttt ctctgagaga aggtgtgata gagcagagct 240
taagcctggg tgggaaatga aactgcccac cactctctcc accccgcctt ggtcttccga 300
gggtgacagg tgggacgctg aagagagctg ccctcctggt cccggcctcc atgtgaacag 360
cctcctccca aatcttcctt tggatctg 388

<210> 755
<211> 415
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(415)
<223> n = A,T,C or G

<400> 755
cgttgctgtc gctccatttt cgtctagcag tggaagaaga ctgaatatct cgtataccag 60
aaacatgact cttaaagatg gtaaaaacaa tgtagccata gctgtaacgt ataaccatga 120
tgggtcttat agcatgcaga ttgaagataa aactttccaa gtccttggta atctttacag 180
cgagggagac tgcacttacc tgaaatgtcc tgttaatgga gttgctagta aagcgaagct 240
gattatcctg gaaaacacta tttacctatt ttccaaggaa ggaagtattg agattgacat 300
tccagtcccc aaatacttat cttctgtgag ctcacaagaa actcagggcg gcccccttagc 360
tcctatgact ggaaccattg aaaaggtgtt tgtcanagct ggagacaaag tgaaa 415

<210> 756
<211> 414
<212> DNA
<213> Homo sapiens

<400> 756
cccggaacct gggtctgagc cctgctcagg tttgtcccag ccggctcagc gcagctggct 60
gtgtgttgct gctcctacag ctcaatgcac tggaccttct cgtccagcct ggatgcctct 120
atcatttctc tttgtctttc tctggcctcc ataccgttct gaagagctca ccttcctcta 180
ggttcctcct gccctgctct tcccaagtga cccagccctc acctgtaggg cagccaaggc 240
tggtggtgca gctgccccca gtgaaggtca ttgggcatcg cactgggcag tgcagaggtc 300
caggctgagg agttgagtgg cgcgcccatc ctggcgcctg tgcagagaac gggaggggag 360
cccctggctt ggatcctaga atcggggaag tctgagggcc cccctgcagt ctca 414

<210> 757
<211> 415
<212> DNA
<213> Homo sapiens

<400> 757
ggcacgagca gccccaggcc cccgtgctct ctgccaggag gtgccttgcc acttggcatg 60
gccccagtca cgggtggcac atctgggggtg aatgcacgtc agtggaggca gaatcattct 120
gtctgaatga atggagtttc caggcccccca ctggccctct gtgtgagggt ctgcagggtt 180
tggcaggaca ggtctttctc tccggcgaga gcacccaccc tgaccggctg ctggatgagg 240
gcaccaaagc tcgctaggga gggctctgtc cttatggagg agctgcggaa tccctgcagc 300
tgtgccccca ggccctgcct tgcacacttt ctgcagccag ggcgcccctg gggaggtcag 360
ggcaggccgg ggaggctgag ggccacctgg catagtgggc aggcgggggga gccgt 415

<210> 758
<211> 413
<212> DNA
<213> Homo sapiens

<400> 758
cgattcgaat tccgttgctg tcgcccacac agggcacata ttccacgcac cccacacggg 60
gcaggcagct cacacagggc acagacccca cgcaccccac acagggcaca gaccccacgc 120
accccacaca gggcacagac cccacacacc ccacacaggg caggcacctc acacagggca 180
cagaccccat gcatcccaca cagggcaggc accccacaca gggcacagac cccacacacc 240
ccacacaggg caggcacccc acacagggca cagaccccac gcaccccaca cagggcaggg 300
atcccacgca gggcacagat cccacgcagg gcagggccag cccaaggcca agccccttcc 360
ctgtagatct tctcccaggc aggaccagag ccacagtcac tttcacacta tct 413

<210> 759
<211> 418
<212> DNA
<213> Homo sapiens

<400> 759
cgttgctgtc ggtttcccgg aggaaatgac aattacctga cgatcacagg gccttcgcag 60
cccttcctgt caggggccga gacattccat acaccaagct tgggtgatga ggaatttgaa 120
atcccaccta tctccttgga ttctgatccc tcattggctg tccagatgt ggttggccac 180
tttgatgacc tggcagaccc ttcctcttca caggatggca gtttttcagc ccagtatggg 240
gtccagacat tggacatgcc tgtgggcatg acccatggct tgatggagca gggcggcggg 300
ctcctgagtg ggggcttgac catggacttg gaccactcta taggaactca gtatagtgcc 360
aacccacctg ttacaattga tgtaccaatg acagacatga catctggctt gatggggc 418

<210> 760
<211> 405
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(405)
<223> n = A,T,C or G

<400> 760
cgttgctgtc ggatcatttg aagcaaacct cagaaatcac tttattccta aatatttaag 60
tatgcatctc taacttatta aaatttttt ggttttgttt tttgtttttc tgagacggaa 120
tttcgctctt gttgcccagg ctggagtgca atggcgcaat cttggctcgc tgcaacctct 180
gtctcccagg ttcaagtgat tctcctgtct ctactaaaaa aacaaaaaaa atcanctggg 240
tgtggtggcg ggggcctgta gtctcaacta ctcgggaggt tgaggcagga gaattgcttg 300
aacctgggag gtggagattg cagtgagctg aaatcacgcc actgcactcg agcctgggca 360
actgagcgag actctgtctc aaaaaaaaaa ggccaggctt ggggg 405

<210> 761
<211> 378
<212> DNA
<213> Homo sapiens

<400> 761
tttggtattg ccgttattat tgttgttaaa ctgactaaaa tcatacatgg aataatagaa 60
atcaggccta acatcagata gacttttcca ttcagttaag ttattgtgta gcaaaattta 120
ttttgtcagt tcactacaca atgtgacagt atatagtttc tctaatagag taacattaaa 180
gaggacatat aatataacca aaaatttgag ttccagataa gtttggtgtc tcactagcaa 240
gatgacgtta aataactcat ttaatttttt tgaaatctta attttctgtt ctgtaaaaaa 300
aaaagcaatc tgtctcttgt ccaaaagact atgtaggttt tttaaaaatt ttttattatg 360
tcatatacat gtgcatac 378

<210> 762
<211> 353
<212> DNA
<213> Homo sapiens

<400> 762
cgggaggctg aggcaggaga atcgcttgaa cctgggaggc agaggttgca gtgagccgag 60
attgcaccat tgtgctccag cctgggcgac aagagcaaaa cttcatctca tagaagaaaa 120
aaccaaaact ccagtttagc aaaaaaaaaa aaaaaagctc ccccggcccg gggggagggg 180

tttatggcta aaatcccaaa cctttgaaag gttgggggaa aaagatacct ggacccccg 240
ggtgggaaac cgccgggcta taatagggga tacccgtttt tttaaaaagt taagaataag 300
gggggggggg gggggggatac cccttagaac ccgagatttt ggaaggcccg ggg 353

<210> 763
<211> 405
<212> DNA
<213> Homo sapiens

<400> 763
cgttgctgcc gaatcgtgat aaagacaaag aacttttaaa attaactcac tacctcaagg 60
agatagcaaa attagatgac tttttggatc taaatcacaa atattgggaa agatatctct 120
caaagaagca aggacagtag ttacaagtta tactggcagt tattgaagat acttaagatc 180
caagaacttc ttgcttttat gctagaaatc attatgatag tgctggacac tgaagcaaat 240
accatactgc ttatacttgg tcttccagtt ttttgtaaat ttaattttat atttttgaa 300
gatgatagca atatgctaaa aaatgcttgt cccctatatg aatattctgt tacgcttgaa 360
aaatattttc tccagcgttg gttactgacc accccaccct cccac 405

<210> 764
<211> 409
<212> DNA
<213> Homo sapiens

<400> 764
ggcacgagag agtccgtagg tttatcatat tatcaaggaa aactgtgacc caaagaagtt 60
taggaatcac atacagtgct gctggctttt tgtgcttggc aaatgagtga caatagaaga 120
aataattttt cttacacatt ttaaaacgat ttctcttcct tgtgattgaa gatgaaagga 180
gtaagaaatt aaggcatttg tttaatttat actggcaact tatttagggg ggaggggaca 240
tgaaggtagg taaataggta ggcctctaat tgaaccacct ctctaagata tgtacgtata 300
tataagctga tattgtgttt gacattctga agggtttctt tttctttttc ctttttttt 360
tttttggggg ggggccgggg gctaaaaact ttttttttg acccccggc 409

<210> 765
<211> 381
<212> DNA
<213> Homo sapiens

<400> 765
atcattcttt gaaaactgac aggaaagata caacttagaa aacattgtgg atgaatactt 60
ccccctttg caaatgatat tttggaagca caaaagaaaa agctctaata caaatattca 120
taatgaaaat atgaacttaa taataccaat ggcaagacag aataattagg agaaatcggg 180
taacgagcat ctctcctatt tttagtttgt aagccttttt tgctttttt ttttttttt 240
ttgaaaaaaa agtttatttt tttgccccag aaggccaggg aattaatttg gcttaatggg 300
agcctcaccc tccggggtta aaacattttt ctggctaaaa cttccaagat atttggaaat 360
agggggcctc ccccccccc g 381

<210> 766
<211> 405
<212> DNA
<213> Homo sapiens

<400> 766
cgttgctgtc ggccccggca gccgatgagt gtgactaccg ggatgaacag acatgcgccc 60
accagatgat tgtttaaccg ggagtttatc aatactgtgg aaagagaacg ccttggagag 120
ctgctgacag ctatattaat tgaatgaggc tggaaggatc acgtgaaggc actctgtaaa 180
gataatgatt ataaatgata tgattcggtt tttgcttttg cataagaggc tgttagagag 240
ataggactat aacacgttac tgttgttgac ttggtggctg aaatcactcc aaaaggcaga 300

gccctggtac ctgacagtgt aaagaaggag ctcctacaaa gaatatgaac attccttgct 360
cagcatgcca gcctttaaga ttgaattaga ttgggttgtt gtggg 405

<210> 767
<211> 381
<212> DNA
<213> Homo sapiens

<400> 767
gcattttgat gtgtagaatc aggggatcca ggatcatcac caaggtcatt ttcccagaca 60
gatgtgctga ggctgtagaa agtgcttttt atttggttgg gagcttgtgc ataaatgcga 120
gaggggctgc acatctgacg gactagaggt gactcatggc tgaaccggaa caggacatcg 180
gggagaagcc agcagagctt gtgtttaaag tcagaattca gaaccccaaa gaaaatgact 240
tcattgaaat tgaactgaag agacaagaac tgagttacca aaacctacta aacgtgagtt 300
gctgtgaact ggggattaaa ccagaacgag tggagaagat cagaaagcta ccaaacacac 360
tgctcagaaa ggacaaagac a 381

<210> 768
<211> 406
<212> DNA
<213> Homo sapiens

<400> 768
cgttgctgtc ggatggctcc ccctatgaaa gttgtccagt gagcagggtc aaggtttatg 60
tttggggtac ggacatgagt gcaggagcct tactctcctg tgtgttgtca gggatggata 120
aaggggatga agttggaggg gtttagtgaa tggttgggac agcaaatttc agagaagagc 180
atttggaaat aatttttctca aatatatatt tttaaaatcc atatttgatt tttttccctc 240
agggattccc aagcatagta gagctaaaat gaattaattt gggtaaaagt aaagttaagg 300
ctaagttagg aaacactttt aaaaacagga acctgctgcg tgcggtggct cctgccttgt 360
ggtcccagca ctttgggagg caaaggcggg tggatcacct gagatg 406

<210> 769
<211> 388
<212> DNA
<213> Homo sapiens

<400> 769
agggtactgt ttcttccttt ccaaaggcca cagggagacc ttgtaatctg ctttccagag 60
cctttgggaa agtggtcaac accctgccct cttaggaaga gcccagagaa acagagggct 120
atcccggggg ttttgtttat ctgcccttgt ggagttggca gacgtgggct tctgtcttcc 180
ctgctatggc ctcagagctt tagatcctgc tggtttaggg aatttgaatc tttcctgtta 240
gggaaaaatg agtgcttact gtgctttgta gaaatatttt cagaattcat tttctttaaa 300
ttattttcat tgtctttaaa ttatatctaa acaagtatac catagctttc ctgagaggga 360
aaacaatcta tccaacacat tgtgcact 388

<210> 770
<211> 382
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(382)
<223> n = A,T,C or G

<400> 770
cctactaggt caagtgagta ccaaggacag cgtggcaggt gaccatacag acgcctgaat 60

aacaggaggc atgctgcatt gaggcctacc tttggaaaaa gataccacga tgctttaaca 120
accgtggtta atagtgttca tgcctttgtt aattgtactc atgaagtagt aataaaggtt 180
aatattctcc attggcatta tcaaatatta aagtactggc caggcgtggt agctcatgcc 240
tgtattgcca gcaatttggg aggctgaggc aggtggatca ctagaggtta ggagttcgag 300
accagcctgg ccaacatggt gaaaccccgt ctccattaaa aatacaaaaa aattaccgag 360
atgtggccag gcacggtggc tn 382

<210> 771
<211> 411
<212> DNA
<213> Homo sapiens

<400> 771
cgttgctgtc gggctggtct tgaactcctg acctcaggtg atctgcccgc ctcagcctcc 60
cacagtgctg ggattacagg gatgagccac cacgcccggc ccatttttt ttttgacaac 120
ttttttttt ggaaaagggg tttggtccct tggccaaaat gggagggcgg ggggtaaata 180
aaacttaatg gggcccagaa ttcttttggc ctaacccccc aaggagttgg aaacaacggg 240
gggacccctt aggccgggca agtttttcat tttttggaaa aaaaaggggt ttttttttt 300
taaaaaggag tttcctttg gcccccaaag gggaggggg agaccggggc caacctaatg 360
gggagccccc cccccaaggg ataccccata tttgggcgca aaaattaggg g 411

<210> 772
<211> 410
<212> DNA
<213> Homo sapiens

<400> 772
cgttgctgtc gcacagccca gccccctcca gagccctgcc ccaccgcacc ctgcttctcc 60
agggcctagc agaccagcat ctgccccggt gaagggatgg atcagctgtg ggggtgggtg 120
cagaaggttg ccacctccta cctcagcggg agtcacctag gaaagatgga gggattgaca 180
ctatttctc aataaaatgg gacttttttt tttttggggg gaaacttcct gttcccaatt 240
gcataaaaaa ccctttttgg gcccaaggtt cccaaaaatt tttaaaaacc ccatttggtc 300
ctttttttg gttgggggg gccccaggcc ttctggaagg gatttaaacg gggctgacgg 360
cttgaattaa agggggatg ggaatcccgg aacaaaaaaa ccgggaaccg 410

<210> 773
<211> 383
<212> DNA
<213> Homo sapiens

<400> 773
ccgccctgcg cccggtcccg gcctttccct gccctctggc cggtcctcct cccgcggccg 60
tcccgggacc tgtgcccaga cccctggggc cacgatcacg ccccagccgc ccaagtcacc 120
gcccctcccc tcccttccag cgttcccgcc cgggcggtgt atggtggctc cggtgtatgg 180
cggttctcgc acgcacagcc gcaggggttt cctctcctag actcgaggcg gaggcgcacc 240
tgcaccctct aaaactcccc cgtcggccct cgcggactat cgggaggcgc ggagggccga 300
gctgacgtgc gtgcgagcgg gcgccatgaa agcgcggagc cgtcctaggg ctaagccttt 360
ctttaacagg gggaggccca cga 383

<210> 774
<211> 410
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(410)

<223> n = A,T,C or G

<400> 774
cgttgctgtc gcaggaagtc attagcagag tgatttccag aaggcgtaga atttagtgac 60
caaggttctt tccttttgg gaggagaaag tgaaaactag gatgctcagc tggacccacc 120
agcctgagat tctggggatt ttagagctgt cccttgggga gccaagcact tgggggtgga 180
ggtgatagcg aggctgatgg cccctgtgtt ctcagctctc tgcctgggta gcccctgggt 240
gatgggggag aggccagctg tcacgtgggg tatcaggtgg ctctgccaga aactcccttg 300
gcacacagag cactgggtcg gccctcgggt gtggctgttt gggcaggaca gccctctgta 360
tgtagccttg agcaggtaag ggggccacct tgagtgggtg gnccagaaan 410

<210> 775
<211> 409
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(409)
<223> n = A,T,C or G

<400> 775
cccatcgatt cgaattccgt tgctgtcggg gggatcttgc aaaatgccga tttctggcaa 60
ggcatcaggt gatggtgaag aaagttttga gtaccaagag gtagagtagt ggttcttaga 120
ctttaaaagc tggacacccc caccagtgct tttgattcac ctcactgggt ggggcctgca 180
gatttcattt taaacaggtt cctaggtgat gctaatgcac atgaagggca gggtgtgttc 240
tgagagccac tgtggtggag tagaaacaac cgaggagaat caagcccatc catctcatcc 300
tggcttcttg agcattattt ccttttttctt tgnttttgat ttgagacagg ggttcactct 360
gtcactcagg ctagagtgca atggcatgat cctggctcac tgcagtctn 409

<210> 776
<211> 408
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(408)
<223> n = A,T,C or G

<400> 776
ggcacgaggt tgactgcaga gtgaaacatc cttgcaatct cttcccacct ccttcacgac 60
actgagttgc catgtgaggt tcttcaagtc tgagagtgga agggatccct atggagactc 120
ctattaaacc cctattagag gaagagattg agagacctag caatgtgaag taacaaagat 180
caggcagctg caagtgactc ctgaatcttg agtccagggc tttcgccact acagtacagt 240
ggttttcttt tctttggtcg gggagagtgg gctggaatgg agagtgaggc ccacaaatta 300
cctgcagaga cgtggaggcg tgagggagaa catgcttgtt aaatatgcag gtagattagg 360
agacaccaaa cagagattca gacacagtaa ggctgggatg agatcctn 408

<210> 777
<211> 408
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(408)

<223> n = A,T,C or G

<400> 777
cgttgctgtc ggaacagcac tgctgggctg gagacggcgg gagccgctgc tctccggctg 60
agggaatcag agacagctcc gtccctagtg gagcgcaggg gaggcagaag tcatgacagg 120
cgaggtgggt tctgaggttc acctagaaat caatgaccca aacgtcattt cacaagagga 180
agcagatagt ccttcagata gtggacaggg cagctatgaa acaattggac ccttgagtga 240
aggagattca gatgaagaga tatttgtaag taagaagttg aaaaacagga aggttctaca 300
agacagtgat tccgaaacag aggacacaaa tgcctctcca gagaaaacta cctatgacag 360
tgccgaggag gaaaataaag agaatttata tgctgggaaa aatacaan 408

<210> 778
<211> 405
<212> DNA
<213> Homo sapiens

<400> 778
cgttgctgtc ggctctgagg ggctccttgc cagggctgtg gtccaggcgg cctcggcccc 60
cctggggctg tggacaggag ctctggctgt cctacgtagc ttgtggagcc gctggggctg 120
cagccaccgg atctgctccc gggtgcacct agctcagccc ttttccctgc aggaatacat 180
cgtcagtgcc agaagctgct ggggcggcag acagaccctg gagcagctac tgcagcccat 240
cgtgctgggc caatgtactg ctgtcccaga cactgagaag gagcaggagt ggacccccat 300
aactgggcct ctcctggccc tcaaggaaga ggaccagctc ctggtcagga gactgagctg 360
tcatgtcctg agtgccagtg tagggagctc tgcggtgatg agcac 405

<210> 779
<211> 406
<212> DNA
<213> Homo sapiens

<400> 779
ggcacgagag caccggcggt tgcatttttg gccagtcgcc tttgcccgcg ccccccgggt 60
gccccatcac tggtctctac aacaagagtc cctactactg cgggacttgt ggccgctggt 120
tccgcgccat ggcgggcttg cgactgcatc agcgggtcca tgcccgagct cggactttga 180
cgctacagcc tcccagatca ccatctcctg ccccaccccc acctccagag cctcaacaga 240
ctatcatgtg cacagagctg ggggagacca tcgccatcat tgagacatcc cagccactgg 300
cgcttgagga caccctgcag ctgtgccagg ctgcacttgg ggccagtgaa gcaggcgggc 360
tcttgcagat ggacacggcc ttcgtgtgac gccaactaaa agcaac 406

<210> 780
<211> 411
<212> DNA
<213> Homo sapiens

<400> 780
cgttgctgtc gccgccgcta ccgtttcgag ggcgagggtg acatacagcg tttccagcgg 60
gactttgtgt cccgcctgtg gcttcacata ccgccgggac ttcccgcccc ttcctggggg 120
ctgcctgacc tcggactgcg gctgggggtg catgttactc agcggccaga tgatgctggc 180
acagggcctt ctgctgcatt tcctgcccat agactggaca tggtccgagg gcatggtcct 240
gggccccccc gagctgtcag ggtcagcctc tcccagccgt gaccatgggc ctgcccgctg 300
gatgcccccа cgctgggccc agggtgcccc tgagctggag cacgaacgcc ggcaccggca 360
gattgtgtcc tggatcggcg accacacacg ggccacctтt ggcctactcc c 411

<210> 781
<211> 407
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(407)
<223> n = A,T,C or G

<400> 781
cgttgctgtc gcttttccca ctgaaacaca cccaagtata tgcccagcct tcatgaaagt 60
gaacagagaa acgaagcgcc tttatgtggg tggccttagc caggacattt ctgaggcaga 120
cctacaaaat cagttcagca gatttggaga agtttcggat gtggagatca tcacacggaa 180
agatgaccaa ggaaacccac agaaagtttt tgcatatatc aacatcagtg tagcagaagc 240
ggacctgaaa aaatgtatgt ctgttttaaa taaaacaaaa tggaaaggtg gaacattaca 300
aattcaacta gcaaaagaaa gctttctgca cagattggcc caagagagag aagcagcaaa 360
agctaagaaa gaagaatcaa caacaggtaa cgccacactc gttagan 407

<210> 782
<211> 405
<212> DNA
<213> Homo sapiens

<400> 782
ggcacgagac catggcgtcc ctcttcaaga agaaaaccgt ggatgatgta ataaaggaac 60
agaatcgaga gttacgaggt acacagaggg ctataatcag agatcgagca gctttagaga 120
aacaagaaaa acagctggaa ttagaaatta agaaaatggc caagattggt aataaggaag 180
cttgcaaagt tttagccaaa caacttgtgc atctacggaa acagaagacg agaacttttg 240
ctgtaagttc aaaagttact tctatgtcta cacaaacaaa agtgatgaat tcccaaatga 300
agatggctgg agcaatgtct accacagcaa aaacaatgca ggcagttaac aagaagatgg 360
atccacaaaa gacattacaa acaatgcaga atttccagaa ggaaa 405

<210> 783
<211> 406
<212> DNA
<213> Homo sapiens

<400> 783
cgttgctgtc ggggctgcag cggcgctgtc tttatttgaa cgacgtgaaa attacttttc 60
ccactgaaac acacccaagt atatgcccag ccttcatgaa agtgaacaga gaaacgaagc 120
gcctttatgt gggtggcctt agccaggaca tttctgaggc agacctacaa aatcagttca 180
gcagatttgg agaagtttcg gatgtggaga tcatcacacg gaaagatgac caaggaaacc 240
cacagaaagt ttttgcatat atcaacatca gtgtagcaga agcggacctg aaaaaatgta 300
tgtctgtttt aaataaaaca aaatggaaag gtggaacatt acaaattcaa ctagcaaaag 360
aaagctttct gcacagattg gcccaagaga gagaagcagc aaaagg 406

<210> 784
<211> 408
<212> DNA
<213> Homo sapiens

<400> 784
cgttgctgtc gaaacttgct gtagaagaaa ccaaagggga acttctgttg caactatgtc 60
gtttggaaga tgctgcagat gtttatagag gattgcaaga gagaaatcct gaaaactggg 120
cctattacaa aggcttggaa aaagcactca agccagctaa tatgttagaa cggctaaaaa 180
tttatgagga agcctggact aaatatccca ggggactggt gccaagaagg ctgccgttaa 240
acttttatc tggtgagaag tttaaagaat gtttggataa gttcctaagg atgaatttca 300
gcaagggttg cccaccagtc ttcaatactt taagatcatt atacaaagac aaagaaaagg 360
tggcaatcat agaagagtta gtagtaggtt atgaaacctc tctaaaag 408

<210> 785
<211> 408
<212> DNA
<213> Homo sapiens

<400> 785
cgttgctgtc ggaaaagcag atttgtgata aacttgctgt agaagaaacc aaaggggaac 60
ttctgttgca actatgtcgt ttggaagatg ctgcagatgt ttatagagga ttgcaagaga 120
gaaatcctga aaactgggcc tattacaaag gcttggaaaa agcactcaag ccagctaata 180
tgttagaacg gctaaaaatt tatgaggaag cctggactaa atatcccagg ggactggtgc 240
caagaaggct gccgttaaac tttttatctg gtgagaagtt taaagaatgt ttggataagt 300
tcctaaggat gaatttcagc aagggttgcc caccagtctt caatacttta agatcattat 360
acaaagacaa agaaaaggtg gcaatcatag aagagttagt agtaggtt 408

<210> 786
<211> 409
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(409)
<223> n = A,T,C or G

<400> 786
cgttgctgtc ggccccgccc aggcggctgc ccgtgacctg cctgggcgcg gggaactgaa 60
agccggaagg ggcaagacgg gttcagttcg tcatggggct gtttggaaag acccaggaga 120
agccgcccaa agaactggtc aatgagtggt cattgaagat aagaaaggaa atgagagttg 180
ttgacaggca aataagggat atccaaagag aagaagaaaa agtgaaacga tctgtgaaag 240
atgctgccaa gaagggccag aaggatgtct gcatagttct ggccaaggag atgatcaggt 300
caaggaaggc tgtgagcaag ctgtatgcat ccaaagcaca catgaactca gtgctcatgg 360
ggatgaagaa ccagctcgcg ggcttgcgag tggctggttc cctgcagan 409

<210> 787
<211> 410
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(410)
<223> n = A,T,C or G

<400> 787
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aagccggaag gggcaagacg ggttcagttc gtcatggggc tgtttggaaa gacccaggag 120
aagccgccca aagaactggt caatgagtgg tcattgaaga taagaaagga aatgagagtt 180
gttgacaggc aaataaggga tatccaaaga gaagaagaaa aagtgaaacg atctgtgaaa 240
gatgctgcca agaagggcca gaaggatgtc tgcatagttc tggccaagga gatgatcagg 300
tcaaggaagg ctgtgagcaa gctgtatgca tccaaagcac acatgaactc agtgctcatg 360
gggatgaaga accagctcgc ggtcttgcga gtggctggtt ccctgcagan 410

<210> 788
<211> 410
<212> DNA
<213> Homo sapiens

<400> 788
cccatcgatt cgaattccgt tgctgtcgag attagtgcca ttggaagggg catatgtgtg 60
ttgctgggta tttccctgga ggatacgcag aaggaactgg aacacatggt ccgaaagatt 120
ctaaacctgc gtgtatttga ggatgagagt gggaagcact ggtcgaagag tgtgatggac 180
aaacagtacg agattctgtg tgtcagccag tttaccctcc agtgtgtcct gaagggaaac 240
aagcctgatt tccacctagc aatgcccacg gagcaggcag agggcttcta caacagcttc 300
ctggagcagc tgcgtaaaac atacaggccg gagcttatca aagatggcaa gtttggggcc 360
tacatgcagg tgcacattca gaatgatggg cctgtgacca tagagctgga 410

<210> 789
<211> 406
<212> DNA
<213> Homo sapiens

<400> 789
ctaggacgtc gctgctcttc agcacgaaga agaggaattt cttgttgaag tcgcagagct 60
tccagaagag aactagcagc tcctggtgga actggatctt cttggtggag ttaggcaggt 120
aggtctggag caggggttg gacagcagcc gggctatacc cttgaggatg aactggaagt 180
cctcctcacg atggatgcgg gacaggtagt tcacaaacag gttctcaggg cctggaggat 240
cagcatcatc catggcggtg ccagtggtgg tgccgtccac agtggggctg gcactgctgg 300
cactgtcgtg gtccaaagtg acaatgagca cctgggcagc ctcctccacc aggggttccc 360
ggtagtcaga gaagagcagg tggttgtagg ggatcccgta gcccat 406

<210> 790
<211> 409
<212> DNA
<213> Homo sapiens

<400> 790
attcgaattc cgttgctgtc gggaggccgg gggagacttg gccggcgcgg gacgagcgtg 60
ttggcgcagc agagcgtccg cacacagcac ttgcgggacc tacaggtcat cgccgcctac 120
cgggaacgca cgaaggccga gagcatcgcc agcctgctga gcctggccat caccacggag 180
cacacgctcc acgccacgct gggggtcgcc gagttctttg agtttgtgct taagaacccc 240
cacaacacac agcacacggt gactgtggag atcgacaacc ccgagctcag cgtcatcgtg 300
gacagtcagg agtggaggga cttcaagggt gctgctggcc tgcacacacc ggtggaggag 360
gacatgttcc acctgcgtgg cagcctggcc ccccagctct acctgcgcc 409

<210> 791
<211> 412
<212> DNA
<213> Homo sapiens

<400> 791
ggcacgagcc tgggcattta taccttcacg aagcgggtag ccttggagga gatggagaat 60
aagccccgga aacagcaggg ctacagcacc gtgtcccact tcaacattgt gcactacgac 120
tgccatctgg ctgccgtcag gttggctcga ggccgggaag agtgggagag tgccgccctg 180
cacaatgcca acaccaagtg caacgggctc cttccggtct ggggacctca tgtccctgaa 240
tcagcttttg ccacttgctt ggcaagacac aacacttacc tccaggaatg tacaggccaa 300
cgggagccca cgtatcagct caacatccat gacatcaaac tgctcttcct gcgcttcgcc 360
atggagcagt cgctcatcgc atacactggc ggtggcggcc gggagagcaa ca 412

<210> 792
<211> 369
<212> DNA
<213> Homo sapiens

<400> 792

tgagcaagga tggggctggg gcgagaggga gaacaggacg gagctggcct ccagctcctc 60
atggtgcaga tctgcgaggc acacatgacc cgcagtgtcc ccaggtgacg cctcattagg 120
aagtgggaga tacatacagg ttagcaaacc tcggcctgca ggtcatgtcc ttttccgtgt 180
gtcctgtgag tgaagaatgg ttttacatta ttttttattt tagtttttg agacaaggtc 240
tcactccatc gcccaggctg gggtgcagtg gcatgatctc ggctcactag agtctctgcc 300
tcctggtccc aagtgatcct cccgccttag cctccctagt agctggcact acaggtgcgt 360
gccaccatg 369

<210> 793
<211> 404
<212> DNA
<213> Homo sapiens

<400> 793
cgttgctgtc ggtgcagtgg cgggatctcg gctcactgca agctctgcct cccctgggt 60
tcacgccatt ctcctgcctc agcctcccaa gtagctggga ctacaggcgc ccgccactac 120
gcccggctaa ttttttgtat ttttagtaga gacggggttt caccgtttta gccgggatgg 180
tctcgatctc ctgacctcgt gatccgcccg cctcggcctc ccaaagtgct gggattacag 240
gcgtattcat gaacttttac atgaatgagt aaggacattg aaagatgcat gagatgatgc 300
atacatcttt gtggttgact tatcattgca tgatgcatga cgtacatgtt cagagtaata 360
ttcttctgca ttatagtgag agaaaaatct tggattttag taat 404

<210> 794
<211> 401
<212> DNA
<213> Homo sapiens

<400> 794
tcgaattccg ttgctgtcga gcacacttgc acctatttga cttaggtcct ttcacaaaac 60
tgttcctgtg aaagcatttc ctgcttttct tcagacggtt tctctagagg actttctaaa 120
gaaaattcag cgagtggatt ttgatatatt ccacccatct ttacagcaga agaatacatt 180
acttccatta tatttggata ttcagtcatg gagaaaaaca tattaaaata atttcatggc 240
cctgatgtta attctagtct attagtttta taaaagctag gattcttatt taggaacacc 300
agaaatgact ggtacgaaaa aatgaatttt ttgatgggaa ggcacgagct cacaaattga 360
taacttgcgc ggactaggtg ccaaacggtg aaatctggcc a 401

<210> 795
<211> 402
<212> DNA
<213> Homo sapiens

<400> 795
cgttgctgtc gcagaagatc atgtgagccc aggagttaca gactgcagtg agctatgatt 60
gcactgatgc actccagcat gggcaagagc aagaccttgt ttctaaaaaa taggtagtgg 120
tatattcata ttctggaata gtgtaaaaaa tgaaaaactg aagataaata tatgaagaca 180
agtcctcaaa atacttctga atgaaaaaaa ttgcaaacat gaatctcaaa aacatgctga 240
gtgggccggg catggtagct catgccggta atcccagcac ttagggaggc cgagttgggc 300
agataacact tgaggtcagg agttcgagac cagaccagcc aacatggtga aacccaatct 360
ctactaaaaa tacaagaaaa aaatcctaac tactcgggac gg 402

<210> 796
<211> 372
<212> DNA
<213> Homo sapiens

<400> 796
ttcaccatgt tgaccaggct ggtctcaaac tcctgacctc aggtgatcca cccttctcgg 60

ccttccagag tgctgggatt acaggagtga gccaatatgc ccatcttgtc ttttctttat 120
aaaccaccca gcctcaggta tttctttata gcaacgcaag aacagactaa cacacttccc 180
ttccaggatc tttcagagca cgtcaagccc ctgttataga ttcttgagct cccacatttc 240
tccttcaaag taattattcc aatcacacta aataaataat aactgtgaat tatttgcttg 300
aagtctgttt ccgatggact aggatgtgag ctccatgaag accagatcag agggccaggc 360
gcggtggctc ac 372

<210> 797
<211> 372
<212> DNA
<213> Homo sapiens

<400> 797
cccccacaga ggctggagag ggcagacggg cctagatgag cctagacgct gggtcccacc 60
agtcccccaa agccagatgt tcctgttctc acctgggtgt gtgagatttt ttgtttcatt 120
atgctcctta caaggcgaag ctgtgtgaac cgtgagcgtg agctctgggc caggctccat 180
ggcccttcta aggaaaaggc cccttaggac acctctgggc tgtgaggctt ccccggcttc 240
ccctctgggc ttggaggaag tagggtaggt cctcagccac tctgctgagg ggcaaaggaa 300
ccagggtatg aacaggaaaa cagaggccca aagagtggct gcagattcag gtgattcctg 360
gggcttgggg ga 372

<210> 798
<211> 350
<212> DNA
<213> Homo sapiens

<400> 798
agggttacag gtacctgcca ccacacccag ctaatttttg tattttagta gagacggggt 60
ttcaccatgt tggccaggct ggtcttgaac tcctgacctc aggtgatctg cccgcctcgg 120
cctcccaaag tgctggggtt acaggtgtta gcccaccgtg cccggcctct ttttttttte 180
gtacaatggc ccattctgtt gccccggacg acattcgatg cccctgttta cagttctttg 240
cctccacttt ctgctagtgt tttgtttttg tcagcctccc ccctgcccga gagaatataa 300
tatagtttgt tccgcacccg cgaaaccata actccctttt atttggttgc 350

<210> 799
<211> 402
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(402)
<223> n = A,T,C or G

<400> 799
ggcacgagcc ctgggccaca tttgaagaag aattttcttg ggccacataa aatacactaa 60
cgatagctga tgagctaaaa aaaaaaaaaa gccggggaat aattttgggg atatctgccc 120
ccacaaataa acaaaaaagc ccttgctttc aaagggtgga aaattgctgc tttgagggct 180
gggaacctgg ggggaaccta ctactccctg ggccttagtc tcccaaatcc accatgcttt 240
tgccccttg aggggtctt cactttgtct ctggcatcta acatggggcc tggggcatag 300
ggagcatgca ataaatattt ggcaggggag gggatggata aatggatagg ggaatgtagg 360
gggacagggg actgggggga tgttgnggcc tctgaaaaac cc 402

<210> 800
<211> 236
<212> DNA
<213> Homo sapiens

<400> 800
aaaaaacaat aaaataaaaa ttataaaggg ggggcgtttt tttcgtgata ccaaaacggg 60
aaaaaacctt ttgggggttg ggcgaccccc cctctttagg ggcggggaaa aaagggtttt 120
tttttgtgaa ttttgagcct cttcttcttt tttgtgcccc cttacgtggt ggcgataagg 180
atctgtgtct ccacccgggc gtgcttcttt tattgcgttg ctctttgcgt gtgcct 236

<210> 801
<211> 131
<212> DNA
<213> Homo sapiens

<400> 801
gtccgacccg ggcaagatgg catcggcgct gcgcgtgcgt tgttgagtgt tcgggacgcc 60
ggcctgcagg cgccatggtc ttcctcaccg cgcagctctg gctgcggaat cgcgttaccg 120
accgctactt t 131

<210> 802
<211> 398
<212> DNA
<213> Homo sapiens

<400> 802
cgttgctgtc gtgaatttgt agctccattt acatggatcc attgccccag ctactggagt 60
atagcctaca atgtttattt cagtcaatat tcctttatct gggtgttctg tacaatgttt 120
attacaggca atattccttc atctggatgt tctgtgaaga tagccatgtt tatgggggtc 180
ttagttttca aactctggca actctgtgaa aaataggagc aaactagaga gccctggaga 240
ttggtagtag ggaagggagg atagcaggaa gtttgaaaaa ttatcagccc cggggcctaa 300
aggaatcagc tgtcatcatt ttcatcatta ttattttggt taggatggct tgaaaatcac 360
aacgtatctt ggtttacgta attgaagtct tacagaag 398

<210> 803
<211> 370
<212> DNA
<213> Homo sapiens

<400> 803
tatagaaatg ctactggctg ttcctgagtt ttagttttaa attactgtca atcattcctc 60
agtggtccca tgcacagtcc ccatgctgca gggaggccag ctcctctggg cctcgtggag 120
taacggtgtt gcttagccca tatcctcctg gacaagtgct ttggttcttc cctttaccgg 180
taaagtgttg caaacgtagt ctatcgagtt tgttctattt catctgttct gtttacgaaa 240
ctgtaacttc atataggact gccttagggc tgaagtaaat aaactgtcaa cctaactaaa 300
acataaaaca ggccgggcgc gggggctcac gcctgtaatc ccaccctttg ggaggacgag 360
gcggtccaac 370

<210> 804
<211> 374
<212> DNA
<213> Homo sapiens

<400> 804
atgaaactct ggatgaataa gagaacagaa aatgcctgat aaattcagat tttcaaagga 60
catgtacagc tttttagtca aagaggcaca gtttattcaa gtaaataaaa cttatattct 120
caggataact aagatttatt tagttagact gagcattcca aattatttat tccacttatg 180
ttaattcaca cagggaagac tgaggctcag gggtgctaga tgactggtta agctttctca 240
gtgacacagc catgacgaca gccaagtttt tctaattttt ggtccaggcc tctctctaac 300
acatcagtga cttctaaaca atcatttgag aattccgagg tgatccttgg tgcaccccat 360

tcctcaccat ccaa 374

<210> 805
<211> 370
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(370)
<223> n = A,T,C or G

<400> 805
tgacctttg atcccatcat gggactgttc cccagcccta ggccactgga atgggggaa 60
atagaaccct cctttccttg ttcccactct tgtttctttt gaacatgggt tacctccctt 120
cgcgtctttt ggaacagaag gggatcataa gctcttgagt ctctgttttc tgctgtcatc 180
tactcttcct gcctctggca cctcccagct cctgacttcc tcctgcttcc ccctggagcc 240
agagacgtgg ctgggaagag cccctggcct ttgaagccag tggtggtggt gaccaggggc 300
aacaggccac tgtgctcctg gatgcgtggt ctgccaggtc tctctcccat cgccctttgg 360
gcctncgggn 370

<210> 806
<211> 373
<212> DNA
<213> Homo sapiens

<400> 806
aagaagctag taatagtcta gcttccactg ctatctgccc gagcttcagc gattccaccc 60
cctcaggggc cacacctccc tgcaggtccc atttctggga aaagccggca atctatgtct 120
tttggaaata ctccctgagc tcccaaaatg ggtttggaaa gagctataca tagctttcta 180
tacattggtc tctatcatct tataggataa taaaggagat aattcatgca cacaaataac 240
tatatgtaat gttacattta gggaaataca ataatttcac tgtccttgcc ttaggatttc 300
catttaagta ggcagagatc cctggggaca ggaataatct gggttcacaa aagggtgaca 360
cctggccggg ggg 373

<210> 807
<211> 374
<212> DNA
<213> Homo sapiens

<400> 807
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accacaagct cttcaaggtt aacaacaccc tcgcccaacc ccctcccccc caaacaattc 120
ttctgctctc ctagagcaga ctttgatcta aattggatct aaattgactc gaaatgtcag 180
gaaaaagaga ttaatgcaca aggtcccttt ctctgagaga aggtgtgata gagcagagct 240
taagcctggg tgggaaatga aactgcccac cactctctcc accccgcctt ggtcttccga 300
gggtgacagg tgggacgctg aagagagctg ccctcctggt cccggcctcc atgtgaacag 360
cctcctccca aatc 374

<210> 808
<211> 370
<212> DNA
<213> Homo sapiens

<400> 808
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tctcgctaga cagtaatgag ggcgtggtcc acctaggagg ggaaacgggg aggcggagcg 120

tggcctgggc tcagggaacg cacgtccatg actctaattt cttgtctctc tctgcgtgtc 180
caaggataag agggaaagta ccccaggcat tgatttgggg ttcacaaata cacacctagc 240
cggcgaattc gcaaatacgg actccgtgaa tgacaaaggg gactacagta caaacccagc 300
ctgtccctcg cgcccctagt gtgctgaggg cctggccgtg gcaggaagga aaaggaccgc 360
tcagaccccc 370

<210> 809
<211> 396
<212> DNA
<213> Homo sapiens

<400> 809
cgttgctgtc ggggagatgg agctgtttta ctcagtgtgt gagtgtgtgt gcgcgtgcat 60
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtctgtctgt ctgtctctct cctcctggac 120
ccagggcacc caagggcagg gataggcgca gtggtcatat gaagcagcgc cagagagggg 180
acctcccagc tcttatttgc accctcccca cctcaccaac tttggtccct ctctgggggc 240
atgaatggtt aacacacacc agagcagtac tccaatattg gagagtctct gggggcacag 300
ggctttgaat caggggagta tcctgccttc cctcccctga ccccacatgg tctcagggcc 360
cccttagggc cccctaccca ctgatagctt tctcct 396

<210> 810
<211> 404
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(404)
<223> n = A,T,C or G

<400> 810
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aaacatgact cttaaagatg gtaaaaacaa tgtagccata gctgtaacgt ataaccatga 120
tgggtcttat agcatgcaga ttgaagataa aactttccaa gtccttggta atctttacag 180
cgagggagac tgcacttacc tgaaatgttc tgttaatgga gttgctagta aagcgaagct 240
gattatcctg gaaaacacta tttacctatt ttccaaggaa ggaagtattg agattgacat 300
tccagtcccc aaatacttat cttctgtgag ctcacaagaa actcagggcg gccccttagc 360
tcctatgact ggaaccattg aaaaggtgtt tgtcanagct ggag 404

<210> 811
<211> 401
<212> DNA
<213> Homo sapiens

<400> 811
cgttgctgtc ggaccgacac tttcactctt caggcacatg atcaattctc tccattttcg 60
tctagcagtg gaagaagact gaatatctcg tataccagaa acatgactct taaagatggt 120
aaaaacaatg tagccatagc tgtaacgtat aaccatgatg ggtcttatag catgcagatt 180
gaagataaaa ctttccaagt ccttggtaat ctttacagcg agggagactg cacttacctg 240
aaatgttctg ttaatggagt tgctagtaaa gcgaagctga ttatcctgga aaacactatt 300
tacctatttt ccaaggaagg aagtattgag attgacattc cagtccccaa atacttatct 360
tctgtgagct cacaagaaac tcagggcggc cccttagctc c 401

<210> 812
<211> 372
<212> DNA
<213> Homo sapiens

<400> 812
cagaaagctt cattaaaacc agtaaagaca tcaagacaat gtaactactg attattacat 60
gaagctaatc tgaagtacaa tcttagatac aaaataagac atagaagtaa tgagtgcaga 120
aggagtaaac agtgaacgta ggtgggggtt gctaggtaac aaatatcaat actgactaat 180
actggcatgg tttatgtgta gttaaaaatt ttaagttaac tatgttcata atcacccaaa 240
ccactggaag gggggaaaaa ggaaaattag aaaacttcat ctattcaacg gacatggaaa 300
atggaatttt aaaaaatttc aaaattctgg ttaatgcaaa ctaggatgct aaatagaagc 360
ccccaattat ct 372

<210> 813
<211> 367
<212> DNA
<213> Homo sapiens

<400> 813
agttcccaaa cctaggcctc agtcctatcc ttcaaaaaaa caagccgaac tttgttttct 60
gtttgccaag gaaagggatt agtgtgtctg caccaagaaa agtaattctt ttccatacaa 120
aaaaggatag gtactatatt ccaatcaagg taacaaacca gtgggctaaa aaagaattgc 180
cttttaattg tgaaaacatt tcctgatctt ttaaaaaaag aaatctacgg gaagtataaa 240
ggcaatcagg taataaactc attgaaaatc agttatagta ttagcaaaag tttacagtgg 300
ttggctttgt cacatagtca tagtttgtgg gagaatcttg accttatttg atgctgtaaa 360
tacttgg 367

<210> 814
<211> 404
<212> DNA
<213> Homo sapiens

<400> 814
cgttgctgtc ggggatgtgg cgccttttte cgctcgccct cgcgcccccc ccgccccgcg 60
cagctaaatt ccggcggagg ggcgagctgg caggccggct cctcccactc tgggcagcgg 120
ggtcccgcgt ccccteeeee actatttggc agcgtctggg ggtctggggc agcttcgttc 180
attcacccgg gggagttggg tttccgggaa gggtcggaag ctcctccctc gcttcctggt 240
gggtaatggg gtggtgcctt tgactccggg ggtggaaaag cgaccccaca ttcaaggacg 300
ccaatggcat gttgagcttt cccaatctaa accaggtgcg tggagggaag caagtgctta 360
ctcccagctt gaaccctgag cagcgggtct ctaactttag agcg 404

<210> 815
<211> 396
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(396)
<223> n = A,T,C or G

<400> 815
cgttgctgtc gccgggatgg gatgtggcgc ctttttccgc tcgccctcgc gccccccccg 60
ccccgcgcag ctaaattccg gcggaggggc gagctggcag gccggctcct cccactctgg 120
gcagcggggt cccgcgtccc ctccccccact atttggcagc gtctgggggt ctggggcagc 180
ttcgttcatt cacccggggg agttgggttt ccgggaaggg tcggaagctc ctccctcgct 240
tcctggtggg taatggggtg gngcctttga ctccgggggt ggaaaagcga ccccacattc 300
aaggacgcca atggcatgtt gagctttccc aatctaaacc aggtgcgtgg agggaagcaa 360
gtgcttactc ccagcttgaa ccctgagcag cggttg 396

<210> 816
<211> 399
<212> DNA
<213> Homo sapiens

<400> 816
gagcatatta tcaaggtcaa aggcagcgcg ataagtacct gacaattctg aaagctgtta 60
aagtgcttca ggccagtttt agaggagtaa gagttagacg gactcttata aagaagcaga 120
ctgcagcgac actcatttag tcaaactaca gaagatacag acagcaaaca tactttaata 180
agttaaagaa aataacaaaa acagtacagc acagatactg ggcaatgaaa gaaagaaaca 240
tacaatttca aaggtataac aaactgaggc attctgtaat atacattcag gctattttta 300
ggggagagaa agctagaaga catttaaaaa tgatgcatat agccgcaact ctcattcaga 360
ggagatttag aactctaatg atgagaagaa gattcctcg 399

<210> 817
<211> 400
<212> DNA
<213> Homo sapiens

<400> 817
ggcacgaggg accgggccga gccgggccgc ccgggcgcag tctttaacca tggcgtccct 60
cttcaagaag aaaaccgtgg atgatgtaat aaaggaacag aatcgagagt tacgaggtac 120
acagagggct ataatcagag atcgagcagc tttagagaaa caagaaaaac agctggaatt 180
agaaattaag aaaatggcca agattggtaa taaggaagct tgcaaagttt tagccaaaca 240
acttgtgcat ctacggaaac agaagacgag aacttttgct gtaagttcaa aagttacttc 300
tatgtctaca caaacaaaag tgatgaattc ccaaatgaag atggctggag caatgtctac 360
cacagcaaaa acaatgcagg cagttaacaa gaagatggat 400

<210> 818
<211> 404
<212> DNA
<213> Homo sapiens

<400> 818
ggcacgaggt tcgatgtgac ggagcgcttt gtcctccaca gacaccagac aggccggacc 60
tgccacaagt gtgggaccca gctgcgggac accattgtgc actttgggga gaggggacg 120
ttggggcagc ctctgaactg ggaagcggcg accgaggctg ccagcagagc agacaccatc 180
ctgtgtctag ggtccagcct gaaggttcta aagaagtacc cacgcctctg gtgcatgacc 240
aagcccccta gccggcggcc gaagctttac atcgcgaacc tgcagtggac cccgaaggat 300
gactgggctg ccctgaagct acatgggaag tgtgatgacg gcatgcggct cctcatggcc 360
gagctgggct tggagatccc cgcctatagc agggggcagg atcc 404

<210> 819
<211> 400
<212> DNA
<213> Homo sapiens

<400> 819
ggcacgaggc ctatcataca ctatccaaat gaagtcattg tcaaagttca cgctgccagt 60
gtaaatccta tagacgttaa tatgagaagt ggttatggag ctacagcttt aaatatgaag 120
cgtgatcctt tacacgtgaa aatcaaagga gaagaatttc ctctgactct gggtcgggat 180
gtctctggcg tggtgatgga atgtgggctt gatgtgaaat acttcaagcc tggagatgag 240
gtctgggctg cagttcctcc ttggaaacaa ggcactcttt cagagtttgt tgtagtcagt 300
gggaatgagg tctctcacaa acccaaatca ctcactcata ctcaagctgc ctctttgcca 360
tatgtggctc tcacagcctg gtctgctata aacaaagttg 400

<210> 820

<211> 398
<212> DNA
<213> Homo sapiens

<400> 820
ggcacgaggc atggctttcc ctgagcctta gccgcggcct ccagagctgc cgcagaaacg 60
gttgaagacg ctggactgcg ggcaggggge agtgcgagcc gtacgattta atgtggatgg 120
caattactgc ctgacgtgcg gcagtgacaa gacgctgaag ctgtggaacc cgcttcgggg 180
gacgctgctg cggacgtaca gcggccacgg ctacgaggtg ctggatgcgg ccggctcctt 240
tgacaacagt agtctctgct ccggcggcgg ggacaaggcg gtggttctgt gggatgtggc 300
atcagggcag gtcgtgcgca aattccgggg ccacgcaggg aaggtgaaca cggtgcagtt 360
taatgaagag gccacaggta tcctgtccgg ctctattg 398

<210> 821
<211> 403
<212> DNA
<213> Homo sapiens

<400> 821
ggcacgagga gccatgcgag cagctcgttc ccttggagaa agaactgtga cagaactgat 60
attacagcac cagaaccctc agcagttgtc tgccaatcta tgggccgctg tcagggctcg 120
aggatgccag tttttagggc cagctatgca agaagaggcc ttgaagctgg tgttactggc 180
attagaagat ggttctgccc tctcaaggaa agttctggta ctttttgttg tgcagagact 240
agaaccaaga tttcctcagg catcaaaaac aagtattggt catgtggtgc aactactgta 300
tcgagcttct tgttttaagg ttaccaaaag agatgaagac tcttccctaa tgcagctgaa 360
ggaggaattt cggagttatg aagcattacg cagagaacat gaa 403

<210> 822
<211> 396
<212> DNA
<213> Homo sapiens

<400> 822
cgttgctgtc ggcggtggga gcgatgaggg tctgagacgg tgggagcggt tgtgtgaaga 60
tggagtttcc cggaggaaat gacaattacc tgacgatcac agggccttcg cacccttcc 120
tgtcaggggc cgagacattc catacaccaa gcttgggtga tgaggaattt gaaatcccac 180
ctatctcctt ggattctgat ccctcattgg ctgtctcaga tgtggttggc cactttgatg 240
acctggcaga cccttcctct tcacaggatg gcagtttttc agcccagtat ggggtccaga 300
cattggacat gcctgtgggc atgacccatg gcttgatgga gcagggcggg gggctcctga 360
gtgggggctt gaccatggac ttggaccact ctatag 396

<210> 823
<211> 403
<212> DNA
<213> Homo sapiens

<400> 823
cgttgctgtc gcgagaagga accgcccaag ccatatcaag tcgagtcccg gccgctcacc 60
atgttccggg acattggcca gcaactgcag gccacctgta cctccctggg gtccagcatt 120
caaggcctcc ccaccaatgt gaaggaccag gtgcatcatg cccgccgcca ggtggaggac 180
ctccaggcca cgttttccag cattcactcc ttccaagacc tgtccagcag catgctggcc 240
catagccgtg agcgtgtcgc cagcgcccgc gaggccctgg accacatggt ggaatatgtg 300
gcccagaaca cacctgtcac gtggctcgtg ggacccttg ccctggaat cactgagaaa 360
gccccggagg agaagaagta gggggagagg agaggactca gcg 403

<210> 824
<211> 393

<212> DNA
<213> Homo sapiens

<400> 824
cgttgctggc ggtaaaatat cattttatct catactgtta gtaggagctt cttaactact 60
acccattctt aactttaaga agcatagaat ttaaaatata gaacgaccgc ttgtatggcc 120
tggatctggg cacttaacct tactaagttt atctcgtgta aactgacctt gctaactcac 180
gtgaggctta aataatacaa tgtggaagac ttcagggcac atttttggtt ttttggtttt 240
tgtttgtttc ttgagacggt gtctcactct gtcgcccagg ctggagtcca gatgcacaat 300
ctcggctcac tgcagcctcc tcatcctggg ttcaagcagt tctgccttag cctccggagc 360
agctggaatt aggtcgccca ccaccacgcc cgg 393

<210> 825
<211> 229
<212> DNA
<213> Homo sapiens

<400> 825
atgtcctctc cacatgaaga atcaatctga attcttcacc actgatgttt tccatctcta 60
acttgaagtt acaaactaac tttagcagga atacttatgg cttacttcgg agcatctgtt 120
acaaggcaag aactatcatg tatgtttgct acattcatat ttaatttcta tttttcttcg 180
agctggccac tcgatttgct gttcagggta tgttccctct ttcttgtct 229

<210> 826
<211> 368
<212> DNA
<213> Homo sapiens

<400> 826
aatataagtg acaagtacac acacacacac acacacacac acacacacac acacacacac 60
aaaacacaga aattactgca tcatgagggt ggaaaatcaa ttttgtccat agaggtcatc 120
acaaatattc ataatttta tagggcttaa cagtgagtcc taacgtcaaa tattcctgaa 180
tgctaatcct aaaactctct aatttataga ctttttcttac tcttaaccaa tcagcgcgcc 240
atcatatcta catgattttt acaaagtgtt tttaactaat tctattccca aaaagtatct 300
gtgtacctgt tgttctggga agcatcagga gaggaagaaa ttaagggcta tgccactgat 360
aacagttt 368

<210> 827
<211> 225
<212> DNA
<213> Homo sapiens

<400> 827
atgtacacat aactgtcatt gtttgcagac aacaggctaa ttcagtagaa aatccatgca 60
aattaactaa aaacccttta ggacaataga attaataaag tggaagatta aaagattaac 120
aaagaaaaat aattgcttcc ctgtactggg aataactaat tagtaaatgt aatagacaaa 180
gatcttatgc tatcactttt tcaatgttat ttattttgta cctct 225

<210> 828
<211> 362
<212> DNA
<213> Homo sapiens

<400> 828
tgtagtggtt tagagtatac actgaattaa tgagctattg ggccacgggg agctgaaagc 60
ttatatatgt gtggagacac tgttctgctt tcaatctcat catccttatc tccaacatat 120
gtatgtatat tgaaatacca accaagtagt gtattttgct agagcttatg gttctcataa 180

ttaatgataa gactgtcagc cgggcgtggt ggctcacacc tgtaatccca gcacttttg 240
agtccgaggc aggcggatcc cttgaggtca ggagttcaag accagcctgg ccaacgtagt 300
gaaaccccac atctactaaa aatacaaaaa ttagctgggt gtggtggcac acgcctgtaa 360
tc 362

<210> 829
<211> 364
<212> DNA
<213> Homo sapiens

<400> 829
atatgactat aaaatctatc ttcatctgta gggaaggtaa tgaattacca taaatgcctt 60
cataatccag tctctctccc tcccctcttt tctaataaaa atgcagagag aacactgtga 120
agctcaagct gcctctaaag aaagtagaga tttacagaac ataacctcac aagatttgtt 180
gatgaattat gaaggaagga catttatttt gagaatcatg agcattataa tatttattga 240
ggattagaaa tttgttatga ggaggtgctt ctacctcctc atgagccact tatgcactta 300
atgcccactg gaagaacatg attaattcgg caaaatccaa ctctcatgaa tatccccctg 360
ttgt 364

<210> 830
<211> 362
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(362)
<223> n = A,T,C or G

<400> 830
cttcctcagt tcgggaggtt taatgataga tggagaattc tgaaagttag gagctacaac 60
tatttgaaat aaaactctag ttacatagtt gaaccgttca aggtaggttg tttaaaagca 120
gtttgttcac aaacaggtat atacacagta gagaaaattt gttattttag caaacgctta 180
tttagctcat gctgatttaa tgagggttgc tttcatgata cttaatagtt ataagaacat 240
tttttacgat tctatagtta aacatttgtt ttgcatacct tgttaaactc cgtctctccg 300
tatagcatat actacttgtt tgacaggaga ttcacaaatg catccaatcc aaagaacaga 360
an 362

<210> 831
<211> 362
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(362)
<223> n = A,T,C or G

<400> 831
taactacatt ttacagaaga tgaaaccaga gctcaaggtc atgttttagt aaagtgaagg 60
ttgtggaatt cagaaccaga tttatctgac tccaaggtcc aagcttttta ccctctacca 120
tccacccaga tgtatttcct gactcattca ggagtttaac tttaattgtg atagtaatat 180
tctcccatca gctaagtgaa ccagcttgga aataagtgta ttaatgaatt tcttcactaa 240
aatttaaaaa tgcctttgta tttatgcata gctaactcct gagtttccat tattgataat 300
aattaagaaa ctggtngtat atgaaaatgg tgttgtagca tacatttggc ttcattatct 360
tc 362

<210> 832
<211> 362
<212> DNA
<213> Homo sapiens

<400> 832
ctatcttaga acaagttaga tagtatatgt acttgtaata acttgtgact agatatgtta 60
gttttgtcta ttaatttttc tgttaaaaag aatatgcatt gaaatgagat ggaaaacaaa 120
atgaaaagtg tttaaaaaat taaatatttt agaaggatca atatcctaag ggttgtgggt 180
aatttttttcc tactttctaa aacttcagat tcctttcact cacttaaggt tgtactacca 240
ttaatgcaat gttttctggg agtgcaagat ttgcaaatga attaataaca gctagaagcc 300
tcactatttg cacttttata acattctttg ctgttatcat tacaaggtaa aattatatag 360
ta 362

<210> 833
<211> 394
<212> DNA
<213> Homo sapiens

<400> 833
cgttgctgtc gaaaaaaacc ccacaaaacc ttgtgggtgt ctgagacaag aacatttcag 60
gcaggaataa cagtaagtcc gaaggccccа aggtaggaac tgcatgcatg atgccgtgga 120
gaacagtcaa gaggtcatta tagctggagt aaagtgagtg aaagagaatg gtaagaaata 180
aggttggaga gaccgggtgc ggtgggctca tgcctgtagt cccagcactt tgggaggccg 240
agatggatgg atcacctgag gtcaggagtt caggaccagc ctggccaaca tggtgaaacc 300
ctgtctctgc aaagaatacg gaaattagcc aggtgtggtg gcaggtgcct gtggtcccag 360
ctgcttggga ggctgaggca ggagagccgc ttgg 394

<210> 834
<211> 367
<212> DNA
<213> Homo sapiens

<400> 834
cggaggctac ggagcagccg ggattcagaa tactactaca gagccagtct gagaggacac 60
tgctgcctcc acctccgaac atgtatctgg atgctccagc ttgctctact gtcatctggg 120
acactgaaca ctaggcaccg gtgccacagt gctaccacat ctgcccctgt gcacttcata 180
ctggtggtgc agctgtctta actgcttccg ctgaccaaca aaatgcattc tccgtggctc 240
ctgcttcttc actgtgagag gtctcattgt ctaacatcct tgggaggatg gactttaaat 300
tcatccccta ccaatgtact ctatcctaac tgtatgggag gcggtgaaat acctaatcgc 360
attttct 367

<210> 835
<211> 371
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(371)
<223> n = A,T,C or G

<400> 835
acagaagggg ggcctctgcc acactggatc tcctcctcat tctcgatcct gcccaaatgc 60
catttctcag agagtggact ctggtcccgg gctgccttga ttcaacagct gggcatgtta 120
cttacttttc ctgtgtccct gtttcaccng taaaatgtcc gtaataacgg tgcctacctc 180
ttatggttgg cacaaggctt atgtaaaaca atcgacacag tgactggcac agtgtgcaaa 240

ggccatatat gattattact taacgtgtcc aattttcatt ttgtgtctat ccctcagccc 300
tatctgacat aatttagtcc cgcttttttgt gggactcctc aacccccccaa ggctaggtat 360
ggccaggtac n 371

<210> 836
<211> 392
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(392)
<223> n = A,T,C or G

<400> 836
cgttgctgtc gggcaaggaa ccactctaag ctcttcagtc actctaatcc agaaactgtg 60
tctttatggc tcaggcaacc agttcatggc agcctagaat gacagggaaa aagctgggaa 120
gggaccttag aaaatcactc ttgcccaata ctccagccaa agtggtcttt taaaaaccaa 180
gttcaggctg ggcgcggtgg ctcatgcctg taatctcagc actttgggag gccgaggtgg 240
gtggatcatc aggtcgggag ttcaagacca gcctggctaa ggtggtggaa accccgtctc 300
tgctaaaaat acaaaaatta gccgggtgtg gtgcacgcct gtaatcccag ctactcanga 360
ggctgaggca gaagaatcgc ttgaacctgg gn 392

<210> 837
<211> 307
<212> DNA
<213> Homo sapiens

<400> 837
cacctgtaat aattgtgtgg ctattccgaa tatgcaaagt tgaataaaaa tgcaaaactc 60
tacatgaata ctcaattgga ttattctcca gctggttgag aatacttacg tagtacttgc 120
aggtattaat tgatttaatt cttataacac atttttttaaa gggtacaaac aggcattgga 180
aaaaatttta aatacagatt taatacctga ctcggaagaa aggtataata aggatggagg 240
atatttgcct tcccgacatt ttggagctca atttttttttt cttagcaaaa gaaatgggtg 300
gacttcg 307

<210> 838
<211> 361
<212> DNA
<213> Homo sapiens

<400> 838
aaaagtaaga tggagcactt gtcttcatgg aagtaaattc atgataatct tgtttaagta 60
tcctattcag taattatgta ttgttaggta gacattattt cacaggacta ttagagcata 120
ttgaacttag aaactttgaa agctctttgg atgctagctg gtacagaatg cccatctgct 180
ctatgattac tgtgagaatt gtgttaaaac tcctggcttc ttgttaattt ccaagtatag 240
tgcaatatgt ggatttcaat atataaagat gaagaaccta gatgttttga gcttttcatg 300
tcagaggtag tctcagagtt gactcatagt tggccaggtc atcttcagct ctcttgctta 360
g 361

<210> 839
<211> 392
<212> DNA
<213> Homo sapiens

<400> 839
cgttgctgtc gtttgcattt aaacaagttg gagttcgtaa gggtgaatta cttgaaatgt 60

actaatagat agtagagaat atttacaaca cattttaaa aatatgaccc ataataatag 120
gtggcattta agaaatataa gcatggtatc tatcttacat gcatattagg agtggacagt 180
tttctatgat tagaagcaca cagttgtcga gcaagggttc taatttttgt acgtgttgtg 240
ggaaagaaag ataatacagg gtgtcattgc aaagatattt aactactcta gataatttag 300
gcctacacta ctctaataaa ttgggttttc caaattattg atacaccttg agaactagtg 360
cctgggtagg cctggagaaa tgactccagg ag 392

<210> 840
<211> 391
<212> DNA
<213> Homo sapiens

<400> 840
ggcacgaggc agcagctggg gaggagccaa agcctcggcg ctcacctaag ccgcagggag 60
atacacccaa ctgggagatg aggaaacagc aacccagaga ggagaactaa cccacacagg 120
atcatttcgc gaaggagcaa ggctgaagaa ccagacctgg actttcttag gcaagtaaat 180
tctgattata tcacggagac ttgctttgag aaatctgccc cttttcactg tgagatggcg 240
tcattaacac atctagttct ctcctaagca gccagcaaac atttattata cactagatat 300
tatattggca tttgagatga tacaaaggaa taaaatgggg caattagctc tagtaatttg 360
gaggtctcaa cttacggata ttccaagttc c 391

<210> 841
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(389)
<223> n = A,T,C or G

<400> 841
cgttgctgtc gcttcagaga tgttctgtcc aagggctagt ttgcacggag gagagcagga 60
atgcagggcc agggcacggc cacccagagc ctcatgctgt tcaaagcggc tgagtgagtg 120
ctttagacca cacaaggcag gtcgagaggc acagtgcatg cttgggagga tggcacgggg 180
cagtgggtga ggatggccca ggtggctgcg gtcaagtgtc cctaccagcc cagcctctcc 240
catatcatca tgggacatga atgtgaggct gtggtgatgg tggcagtgtg aggtttaaga 300
aatacatcta gaaggccagg tgtggtggct cacgcctgca atcccagcac tctgggaggc 360
tgaggtgagt ggatcacgag gtcaggagn 389

<210> 842
<211> 227
<212> DNA
<213> Homo sapiens

<400> 842
gagcacctct gtgttcctag gtctgtgcag tgacttggga gtacagtgat gaatgggacc 60
atatggtccc accctcatgg gcagtctcta attcctgcct tatgaactga agatctattt 120
cttggcctga ctttatattc ttcatggtta aaagttttgg ggcctctgaa gtgtgcattt 180
gaactcaggc atggccttct ggggctgttt atgccctatc accctga 227

<210> 843
<211> 361
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(361)
<223> n = A,T,C or G

<400> 843
aaattagata ataaagtgct tttagtaaca tgcctggcac agttcattga ttcaaacatt 60
gaaaaaaaat ttttttaatt atcatagtag tgtgtacctt tggaaaaatt ataacttaac 120
agataaggct aagtttgagc cttccagacc tttccttctc tgcatactct tcaggggtaa 180
ctgggatcat gttctgggag catgtcattc caagactgtt tctttgcttt tataaacaca 240
tctgtttcca tagaaatgct gtagtggttg cagagggggc ggtgcgtggt atcatcctgg 300
atttgntatt ctgcgctttt ttgcttgacc taccttggat ggctctctag tcgatacagc 360
t 361

<210> 844
<211> 363
<212> DNA
<213> Homo sapiens

<400> 844
cggggttcaa gctggactcg ccacgactag attgcagggg actaaccgct taaattgcgc 60
aactggtgat gctcttgctg tatttggaga catgataaac gagtatatgc tgcatagacc 120
cgacaactgc attcattgta tgtgtcaggt tcaccgggag gtgacagatg ctacacttgc 180
atttattgaa tgagcttatt ggatatcttg ggtgcaagca ggaagcaacc tgctgacctg 240
agctccctgt ggccctggtc ctctccactc tgaaaacatc caggcagatc ttacaactcc 300
tccagtcaca cccagatacc aactctaggc cagaccaatg caatctcttg gcttgaattc 360
aac 363

<210> 845
<211> 388
<212> DNA
<213> Homo sapiens

<400> 845
ggcacgagat tccttgcctg attttattgt acagtgtgca caagcacaat ggtatgcttg 60
tatatagaaa ctaaaaatac tatgaagtac ataagttccc tatggcttat ggagagttat 120
ttattaatta actttatggt agggctagta tgaatacctt tttaacaatt gtgtgctatt 180
acaacaatga agattcaaat gactccgctt tgaaggatgt tttctctata tggtaaaata 240
tatatgaaga agtcttgatt acgtgaagat cacttgactc agaatacttc aatgtatttt 300
gttcacatta ccactaagca tattatcagt aaactattaa ctgactgcac attatgtaat 360
acgttgtact ttttgttgaa ttcaccga 388

<210> 846
<211> 365
<212> DNA
<213> Homo sapiens

<400> 846
cttgggaggc tgaggcatga gaattgcttg aacccaggag acagaggttg cagtgagcca 60
tgatcccacc accacactcc agcctgggtg acagattgag actctgtctc aaaagagtta 120
ttaccacaac aatagactat aaaatctgta gtcttaattt gcatatcatg gtagacagga 180
aaataccttt agcatcttaa taaaagatga atcaaactct ctaataaata ccctagaaaa 240
gacaaacaat acactaaata taagattaaa gagtagtttc taatacatca ttctaagaca 300
aaatgaggga aaaaacccca tttcaaattt aagtcaaaag aaagggtgaa acataaagga 360
gtctg 365

<210> 847
<211> 391

<212> DNA
<213> Homo sapiens

<400> 847
tctacccaag tgaattataa ttaactgcgt cacatttatc attatactga cctttgagca 60
tttcccccaa ctcacagtat tttgtttctc agatatggga tattcgcttg ctttgtgaaa 120
aacatgaaaa tgttagcaga gctcagtgct ttgcccagca gatggcattt gtgtgagttt 180
ttcaggatcc tttggaatct gtcacttgcc aattacccaa tttgttttga atactctgta 240
tttccagtta atattgcacc atttacataa agagaatgtg ccaaaattgc tgtaatctgt 300
tctgtaatca aatctgactg ctgtagatgt ataacttact tttggtaagc tggttactgc 360
aaaatggtct caagacaatc cttttctatt c 391

<210> 848
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(389)
<223> n = A,T,C or G

<400> 848
cgttgctgtc gntattttat gccttcaggt tttaaaaatt ataaacattt acattacagt 60
aaaagtcact ctggtataca gatctataaa gctctgataa atgtgtagag ttgtgtaacc 120
accaatgcaa ccaaggtaca gaacagtcct cttagcctct ccctaccaaa tttattcctg 180
ctactttgta gacaaaacca gtcccctaca cccaaaccct ggcagacact ggnttttttc 240
ttcggtctct attttttttt tttaggaaaa aaagattatt tttttcccca cgctggaagg 300
gggccagggg ggggatttgg aaaaagggca ccctcccccc caggggatta ggggtttttc 360
tggcttggct ccccaagggg gtgggaaan 389

<210> 849
<211> 395
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(395)
<223> n = A,T,C or G

<400> 849
cgttgctgtc gcttacaggg tcattcagac cccatcttag ccctagatcg gtgcttgctc 60
tactcacctg cactgtcctg gggacctggg ctctggcctg tcaccttgag ctccaagaat 120
gtgacctgta cccattcagg ccccttaact ctgacagatg agggtttctt actcctccat 180
gcagggctgg gccagctgtt ggtctcagtc gatcattcag gaagtcatta gcagagtgat 240
ttccagaagg cgtagaattt agtgaccaag gttctttcct ttttgggagg agaaagtgaa 300
aactaggatg ctcagctgga cccaccagcc tgagattctg gggattttag agctgtccct 360
tggggagcca agcacttggn ggtggaggtg atagg 395

<210> 850
<211> 388
<212> DNA
<213> Homo sapiens

<400> 850
gacaaagctg catgcctggt ctcaactccc tagaatttga acacacggct caggggtatt 60

gagctgagat cttgagctca agcaggagag gagccctcac tctcagacca cagagaagac 120
tgaggtgtgg gatcatggga tggcacagca gctgggtata ccatgctctg gaagaccaat 180
ctaggaaggg tgtggcctat ctgccatcct cagcctctgc ctgagggagc tccatgccct 240
gcagcaccta acagacaagc aatcggagaa caaaaggctt gggacaaaac tagctgggca 300
agctcagtac tgggacagac actggaagga gacctgatca gtcgagcaca agctgggaag 360
tccagacagc aatctctggg aaaaaaac 388

<210> 851
<211> 367
<212> DNA
<213> Homo sapiens

<400> 851
ggcctattcc taatggatag agaagaaaga cgacagcggg aacacacaag aagaaaactt 60
actcttcgta gaaaaataga agaggacata cagcgaatgc tgctcatcag cgtcaaaata 120
gttcaaataa ttttacgaaa aaaaactcag cttctgttgt ttatcaggca gatgtaccgg 180
ataatggtat aaatcaaaag gaggtataaa tatttcaggc caagggtcaa ttatttcagc 240
gcaggtatca cccacgagaa atttttccag agcttcacaa gcatttttgg atacttcaca 300
agaagagaag gagaccaatg ctgattggga tggaagacca acccatagat caagctatct 360
ctgcgag 367

<210> 852
<211> 259
<212> DNA
<213> Homo sapiens

<400> 852
cggaggagct cccaaccccc accgggtgca ccttgcagaa cccctccctg agaatccggt 60
cgggattcgc agcctggacc cacacgtgct gctccccaag gcaggtccag cgagtgcaca 120
ggtgcagatc ccttgctgcc acctccactg gccagtgctt ccggagccag gcgtgcccag 180
ggctgcacag acgttagcac cacgctgcac ctcccatttc acggagaagg aaaccgaggc 240
acaaaggcga agcttttcc 259

<210> 853
<211> 393
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(393)
<223> n = A,T,C or G

<400> 853
cgttgctgtc gcggcgggag ccgctgctct ccggctgagg gaatcagaga cagctccgtc 60
cctagtggag cgcaggggag gcagaagtca tgacaggcga ggtgggttct gaggttcacc 120
tanaaatcaa tgacccaaac gtcatttcac aagaggaagc agatagtcct tcagatagtg 180
gacagggcag ctatgaaaca attggaccct tgagtgaagg agattcagat gaagagatat 240
ttgtaagtaa gaagttgaaa aacaggaagg ttctacaaga cagtgattcc gaaacagagg 300
acacaaatgc ctctccagag aaaactacct atgacagtgc cgaggaggaa aataaagaga 360
atttatatgc tgggaaaaat acaaaaatca aaa 393

<210> 854
<211> 391
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(391)
<223> n = A,T,C or G

<400> 854
cgttgctgtc gaaactcctg agctcaagtg atccactcgc cttggactcc caaagtgctg 60
agcttacagg cgtgagccag tgtgcctaac ctcgggggtt cttgactgag gcatagccct 120
tggctttctg ttttcctctg tctcctctcc ctgaggtggc ttgtctggtc ttaggatttt 180
gcttgtcact tccttgctta caactccaaa aactctgcct gggcttctcc agtggaacta 240
cagtcagatg gctgaagcat cccggctctt gggtcccatc ttgagctgcc aggtgcctca 300
aatatggact ggaggagtgg ctgtcactgt ggttcgctcc catgttagat acagggctag 360
tctcagctct gccactcccc atgtgtgacc n 391

<210> 855
<211> 393
<212> DNA
<213> Homo sapiens

<400> 855
cgttgctgtc gccaggtcac atggggaaga gttagctaca aaactggcca cttaatctct 60
ggaggggggc gttggtgggg tgtgtctgtg tgtgtctcag ggggctggag atgcctgcgt 120
gggaggagtg cacctctgac caggtggcag agtggaagga ctgagggctc tcagctgagc 180
tgtgcacatg gcgggcacag gaccggctgg ctgtgagtgg gtgtggcctg tggcctgtga 240
agggtgggag gagggctgtg gagctgggga ttctgggaag ggaatgtcgg cccagctggg 300
aggttgtacc agatgacctc agcggcctct tcagtcctga aaaaaacctc agcatctcct 360
ctgtcgtttt gggccgtgac aggacgcagc cat 393

<210> 856
<211> 394
<212> DNA
<213> Homo sapiens

<400> 856
cgttgctgtc gccctcctgc ttttttttga gcctctcctg aaactgatag atgctgaaac 60
cactgcagga gcctggccta acgtggctgc agtctccatt actgggcgga agcggagccg 120
ggtagcccct gccgagcccc aggaggcccc tgattccact gctgcaggag gctcagcctc 180
gaagcggatg gcgctggtgc tggaacgggt gtgcagcact ctcctgggcc tggaggaaca 240
cctgaatgcc ctggaccggg ctgctgggga cggcgactgt ggcaccaccc acagccgtgc 300
ggccagagca atccaggagt ggctgaagga gggcccaccc cctgtcagcc ctgcccagct 360
gctatccaag ttggctgttc tgcttccgga gaaa 394

<210> 857
<211> 159
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(159)
<223> n = A,T,C or G

<400> 857
tagtggtcca naanatgaaa aaataattga acaaatagag gatatggtga ctacagcttc 60
tacgtacctg tttgaagcca cagaaaaaag atttttttttc aaaaatgtat ctatattaat 120
ttcctagaat tggaaggaaa atcctcagta caaaaggcc 159

<210> 858
<211> 393
<212> DNA
<213> Homo sapiens

<400> 858
ggcacgaggg aacatgggct ttgcagcaaa agcgaagaaa tctgctcatg aaaacatgga 60
tctgaaccaa atatatgatt tgatgcaaga gatcacagag caacaggata tcgcccaaga 120
aatctcagaa gcattttctc aacgggttgg ctttggtgat gactttgatg aggatgagtt 180
gatggcagaa cttgaagaat tggaacaaga ggaattaaat aagaagatga caaatatccg 240
ccttccaaat gtgccttcct cttctctccc agcacagcca aatagaaaac caggcatgtc 300
gtccactgca cgtcgatccc gagcagcatc ttcccagagg gcagaagaag aggatgatga 360
tatcaaacaa ttggcagctt gggctaccta aac 393

<210> 859
<211> 395
<212> DNA
<213> Homo sapiens

<400> 859
ggcacgaggc ctatcataca ctatccaaat gaagtcattg tcaaagttca cgctgccagt 60
gtaaatccta tagacgttaa tatgagaagt ggttatggag ctacagcttt aaatatgaag 120
cgtgatcctt tacacgtgaa aatcaaagga gaagaatttc ctctgactct gggtcgggat 180
gtctctggcg tggtgatgga atgtgggctt gatgtgaaat acttcaagcc tggagatgag 240
gtctgggctg cagttcctcc ttggaaacaa ggcactcttt cagagtttgt tgtagtcagt 300
gggaatgagg tctctcacaa acccaaatca ctcactcata ctcaagctgc ctctttgcca 360
tatgtggctc tcacagcctg gtctgctata aacaa 395

<210> 860
<211> 392
<212> DNA
<213> Homo sapiens

<400> 860
cgttgctgtc gcttgaggaa gcccagtaca tttcaagttg gtcgcggctt gggcattggg 60
aaaggggatg ctttgccccc acccaccctg cagccttctc cactcttccc tcccttggag 120
ttccgcccag taccttgcc ctcaggcgag gaaggggaat atgtcctggc actgaagcaa 180
gagctacgag gagccatgag gcagctcccc tacttcatcc ggccagctgt ccccaagaga 240
gatgtggagc gttattcaga caaatatcag atgtcaggtc cgattgacaa tgccatcgat 300
tggaaccctg attggcggcg tctaccccgg gagctaaaga tccgagtgcg gaagctacag 360
aaggaacgga ttacaattct gctccccaag ag 392

<210> 861
<211> 388
<212> DNA
<213> Homo sapiens

<400> 861
cgttgctgtc ggagataagg actgagtgca gaagataaga gaactcgcat gatggaaata 60
ttttctgaaa caaaagatgt atttcaatta aaagacttgg agaagattgc tcccaaagag 120
aaaggcatta ctgctatgtc agtaaaagaa gtccttcaaa gcttagttga tgatggtatg 180
gctgactgtg agaggatcgg aacttctaat tattattggg cttttccaag taaagctctt 240
catgcaagga aacataagtt ggaggttctg gaatctcagt tgtctgaggg aagtcaaaag 300
catgcaagcc tacagaaaag cattgagaaa gctaaaattg gccgatgtga aacggaagag 360
cgaaccaggc tagcaaaaga gctttctt 388

<210> 862

<211> 303
<212> DNA
<213> Homo sapiens

<400> 862
gctgctctac cctttaatgg atatgtgtgc attgaagatg tctggatgag gagactaatt 60
ctagaaggca gacgtgcctc aataaattaa ggccttccct aagaaacccg agaaatatat 120
agattttgtc ttaaatgttt gtgtgagata tttgcttttc aggcacagat atatcaagtt 180
tttttttatt tctatgttta tattgatatg ccttccacat ggttaattaa ataaaaagag 240
gggaaaagga gaaagaaaaa gattcagagc atcatttgtt aaaaagaaat gtatcattca 300
acc 303

<210> 863
<211> 385
<212> DNA
<213> Homo sapiens

<400> 863
cgttgctgtc ggaaggtatt ctccggcctt agaaagccca ggattaatgc aggattgcga 60
tatttaaaca gaacatttcc atacagcatg agtataaatg actttcccaa gtttacactg 120
agagtaactg acacagcaac cccagcaaag tctgagctga gtcctgaata attgtataaa 180
aaggggagag aaacagagtg aagaaagggt ttcccagact ctgtcccagg aaagaaaatg 240
agctcgtgga gaggaataga ctttctctat gaaaacagag ggaacaaaga ggaagatgtc 300
tgggaaccga ggagtaatag agacctgagt ttacatcact actctgccac tccctaggta 360
cctcccttta cctgtttccc tactg 385

<210> 864
<211> 357
<212> DNA
<213> Homo sapiens

<400> 864
gagacagaga gattagacat tgcaatgaac aaactggttt tgaccattaa ttacattccc 60
tggatacttg ctcaattcac cacacatttt tttttttctg aatcaacatg aaaaagactg 120
gcttagtctg catttaaagc atttcgtaca ttacaatgat cacatgctac aggatttgta 180
agtgctcaag gatgtgttca cagctaggga agtaaagccg acataaagaa atgaaatcca 240
gtttctgtct tcaagacact tacattcttg cataaagtca agaaaatact attaggaaaa 300
caatacttta tattgggtgc cttctttatc tggaggatgg caaacaacca aatcatg 357

<210> 865
<211> 359
<212> DNA
<213> Homo sapiens

<400> 865
caatgagcac aagggaatac attatagttg attttgctca aacttaattt aaaagcctca 60
ttttcctaga actctaatta ttcagatatt catgacaata tttttttaac agtaagaaac 120
tctgagttgg cttcttggag ctgtaggtct tgaagcagca acgtctttca ggggctggag 180
acagaaaccc attctgcaat ctcagtagtt ttttcgaaag gctgagatca tttattgatc 240
gagatatgac ttgttactag ggtactgaaa aaaatgtcta aggcctttac agaaacattt 300
ttagtactga ggatgagaac tttttcaaat acaaaaatat attggcttaa agcatgagg 359

<210> 866
<211> 142
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(142)
<223> n = A,T,C or G

<400> 866
tcctgcacca aagaaatgta aaacaaaccc agagagtgac attgagcagc tttaaagtga 60
cgttgttttc ctttcacctg gtgaatttga gaacgcagtg gcttttgaga ctgtcctgcc 120
aagtggcang tgaggcatgg ag 142

<210> 867
<211> 360
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(360)
<223> n = A,T,C or G

<400> 867
tctcctttag ctgctacaga ctccctgctc tcttcccttt ccagcaaaca ctgtctgctt 60
cctcttgtcc caccagctct tgaactcact cctttcaggc tccatcccca ccaccccact 120
gcatccacta atgccaaggc cacctccatg tggccacatc caatgaccat ctctctgccc 180
tcaggtcccc ggttgaacat gtcagcagca tttgagtagc tgacctcctt tgctttcaag 240
aaacttttcc tgctcttgga tctcttcctg tctccctagc cagattttcc tacttctccc 300
ttactgattc ctcctaattt cctccatcat gaagcactgg agtgtcccag ggttcagtcn 360

<210> 868
<211> 351
<212> DNA
<213> Homo sapiens

<400> 868
attctctata gtgtggatat gaatctatcc atctatctat atatatttat cttggaccaa 60
ctatcttttt atacagtgtg gatgatcaga tataccgcac aaatccctgg ccagtgggag 120
aagttcccct tactactttc agggccactt ctcagtggaa gtccattttc agctggtatc 180
acacataaca aaatggccta ttttcagcat gtgccacaca gaccaagact ggccttttct 240
gtctccatta tcaggtcaaa aggaaacaca catgatgcca taggagtgag atgaggtgca 300
attttggtag ctgacaatgg ggcctgggtc acctgcttgc aatgtacttg t 351

<210> 869
<211> 357
<212> DNA
<213> Homo sapiens

<400> 869
gagttccaag tagggaatcc ttctgagaag tcccaccttt ctgagcagct gtgtttgaag 60
aaagctagtg ggaaaagttc caggattaca tgtcaggaaa ctacaagagg tagaaacatt 120
tgttgattta ccagtgtttt taacttcctg ctgggctgaa aactgcttgt ttcgtggaaa 180
agcaaaactt gacagcaaac atctaaaatg aagagctccc aaacttttga ggaacaaacg 240
gaatgcattg tgaacactct actcatggac ttcttgagcc caacattgca ggttgccagc 300
cggaacctat gctgtgtaga tgaagtagat tcaggagagc cttgttcttt tgatgtg 357

<210> 870
<211> 384
<212> DNA

<213> Homo sapiens

<400> 870
tacggctgct ataatacgac agaagggcac acacacacac ctttttttac actgagagaa 60
tgagaaaaac attaactttt agttctccgt gggccttatt ttcttaaagg aggaaatcat 120
tacacagtaa agcattaatg gccagtgtgt gcttaattta acaacactac aaattcatgt 180
agagatgtct gatcctctag agaggaaact gtcattcctt agctgcagtc ccctcttcaa 240
ctgaagaatt acatttcacc actaggtgtc cacaggggaa caaaggatat cttacacttg 300
cccattccaa gtccctttca cacacactgc actccataaa caacttgtcc taggtcaatt 360
tataaaaacc ttaaatctta tttt 384

<210> 871
<211> 358
<212> DNA
<213> Homo sapiens

<400> 871
tttgtgggag gaaccacttc cactctcagc cactcaaggt ttatcaggat atactagttg 60
agaagcatga aaaataaaaa ctggtaattt cccataacca aaacaaaaag tgttacaaga 120
tacttaaatg atccttggca atacttttat tctatttagt atatgattag gagtttagta 180
gattaaaaaa cccaccacat aaaagacaac tggtatatat tctcctcaga catggtaatg 240
tgatgtaagg gagtaaacct tgaacttcat ttttgtatgg gtcataaaat cgcatgagtc 300
atacttgggt agaacacaca tgattttcaa taacaagttt gtcttccact tcattacc 358

<210> 872
<211> 330
<212> DNA
<213> Homo sapiens

<400> 872
gggagcctga ggaggggcct cacccggcct gaggaaactc actgagaagt ggaggccgag 60
tcagagcctg tgaggcaggg gagtggggac agtctcagcc caaaaaacaa tgctggcgag 120
aggcaggtgc aggggtaagg tcacaaggag ggaagcgcag ccctttcaag gcaggagaga 180
aggcggcagg agagaaggca ccaggacaag ggacagaact agagggaggg taggacctgg 240
catttaggaa ccagcatgtg gctgggcctg ggcgtgaggt taagaaggga gagttggccg 300
ggcacggtgg ctcacgcctg taatcacagc 330

<210> 873
<211> 355
<212> DNA
<213> Homo sapiens

<400> 873
ggtggcatgt acctgtattc ccagctactt gggaggctga ggtgggaaaa tcacctgagc 60
ctgggaggtc aaggctgcag tgagccatga tcacgccact ccagcctggg cgacagagtg 120
agaccctgtc ttaaaaacaa aaaacaaaaa aacccccaaat aagcagaaac aaaaatgcag 180
aagacagaag tctaagaata tattaaaact gtattctaat atagatgtta aattctaaag 240
tcagcagata agtagaaaat ctgtaaatat aaaactgagt ttgaaaactt caggacttaa 300
agcaggcagt aagaggaagt ttggtggaga gacgatattg ttagaatgta aacct 355

<210> 874
<211> 358
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(358)
<223> n = A,T,C or G

<400> 874
gattttagga cttggtgttt ctggcatttc ataggaaata aataaatcaa agcctacagt 60
aagcaacctt cttaatacat cttggaaggg gggaaaaccc caagaccctt atttaggatg 120
aatatattaa tacaatacaa agcacccaac ttctttctgg gaatgactta aganatccat 180
cagcagaagg agacagttgc acttattatg ggatttctag ggcatggggg cgcanagaca 240
aaaaagagct tggtttactt tttcaaaaca tgaaatgctg attcccttct tttgctatgc 300
tattcaggcc ttaaagggaa aagcacaaaa gggttcttgg gcaatgaaga aaaataag 358

<210> 875
<211> 357
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 875
taaactgaaa aatgagtcta aatgcagcca ctttgctatt ttagttcttc ataagactgg 60
aagcaaagca attttactga aatgttatca gtgaaactac tcactctaca atgaaacatt 120
tgtgtttact tttgtggtta gatattttgt ggttaatatg tgtcaaatct ttatccaaac 180
acaaatggta taaagagatg agtaagacag tctgtggctc agggctactt tgttgtaaaa 240
acccagcgac accattctga ctgtggtcct actggttatt ctctatctag caccaagatc 300
tttggaagac atgttaagca attatcttat cactctactg gtcacaatcc tccaaan 357

<210> 876
<211> 326
<212> DNA
<213> Homo sapiens

<400> 876
ctcttccact aacacaggga aattccagcc cagtcctgag gaacatggtc aggtcgatgg 60
gtttaattaa ttcagtatgc aaatgggcca tgaggtttct taaaagagat gacttaaaag 120
atccttttct aaatgatgaa gtccctcagc cccacagaca agaatgggcc ccaaggctgg 180
gcgcagtggc tcatgcctgt aatcccaaca atttaggaaa cggaggcagg aattcaagac 240
cagcctgggc agcagagtga gactctatct ctaccaaaaa taaaaattag ttggccgggc 300
gcggtggctc aagcctgtaa tcccaa 326

<210> 877
<211> 357
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 877
attacatttt attgagctct tagtatagtc attctactaa ttatcaagaa ttgttaatcc 60
tttaaatacc atatttagtc aatacattag cccccaaaac aagtaaacta aagctaagtg 120
agactaaata atcagaagtc aaaataactt gcccaaggtc atatgtaacc aataagttgg 180
ccacatctta gagtaagttc ttagtcgcta acaaagntca cttagttttt ttttgagaca 240

cagtctcact ctgtcaacca ggctggagta cagaggggcg atctaggctg aatgcaacct 300
ccacctccca ggtgaaggag agttttctgc ctcagcctcc acaataactg ggaatan 357

<210> 878
<211> 360
<212> DNA
<213> Homo sapiens

<400> 878
attgttatcc gaaagagaga aataactcct gttaatcaag aaaaagacag aaacttcaat 60
gggaaaaaaa ggaccaatga aagagacaaa ctaccataga tcagatttct tcccatagct 120
aaacagtata caaagaaact tcatatttat aattatacaa atgcaaatca aggcagtgag 180
tcattactct tatcagaaag actctaattt aaaaggataa acacaacaat tattagaaaa 240
tgtgcatagt gttaactttc actcacttgt agtgaaaagt agtctggaaa tattttatac 300
atcatagaga aattccgaga atcatataca ggtagatgat gataaggatt atggtattgg 360

<210> 879
<211> 225
<212> DNA
<213> Homo sapiens

<400> 879
ttccgttcaa attctgacta tgtagtattt tagcaaacct atgctagtaa cattagaaaa 60
aaaataaatt tactatccat agactttatg aaggtcatac atgaagaaat gggtgtttta 120
gtaagaaaca gaaatttctt aagcttctca ttagatttct ttagatttta gttcaaaata 180
gatttgagtg agtttatttc tgatgcgggg ctttaccctg attac 225

<210> 880
<211> 353
<212> DNA
<213> Homo sapiens

<400> 880
cagataattt ttttaaatct attattaaca tgttcaataa aaagatgaaa agatggagaa 60
ttttattaga gaaatggaat atctaaaaat gaattacttg aagagttgct aaatgaaatg 120
cagaataact gtaagtgaaa acacagttgg tgtaacagcg gattagccaa agcagaaaac 180
aggtttgctg gaaataacca tattaaaaca tgaagaccag aaagaattgc aaatgcacaa 240
aacagcatta gaccacaggg agcatgattt tataaaggtc taggccgggc gcggtggctc 300
acgcatgtaa tcccagcact ttgggaggcc gaggcgggca gatcacgagg tca 353

<210> 881
<211> 360
<212> DNA
<213> Homo sapiens

<400> 881
gttagaaggg tcatacaagg ctttatagaa aggattttta agatgagctt ctatatatca 60
attaaaagaa catttcagta gaaacatggg cgtatggtat gataattacc agaagacaaa 120
tgcaaataag tgctgaacac aggaaaaaaa taatcaacct ctccaataat cagaaaaatt 180
gaagttaatc atcattaact gttgggggag tagctaccaa atttgataaa aactcaaaaa 240
ttcgtaataa ttcagaaatt gagaatagcg gccgggcgtg gtggctcaca cctgtaattc 300
tagcactttg ggaggctgag gcgggcagat tacgtgaact caaaagttcg agaccaaccg 360

<210> 882
<211> 385
<212> DNA
<213> Homo sapiens

<400> 882
cgttgctgtc gggcaccgag cctattctgt cgcgttgttc ttatatacat acacggatga 60
cgaccatgag gacagtgggc atcaaacatt ttggattatg cgttattaat cccttatatc 120
actaaaatgc aacactgctg tggatgctat ccttaatata tactgactta tagatgcagc 180
ccactcgaag ttttgtgcca gccttcttac ctatattaga caacgacttc aacagcgcgg 240
ttgctaatgc cacgcaacca ccatgtgtta tgttagcctg cttggatcaa ttgtaattat 300
tactggaatt gaattaatta atatgatttt gaacagatca tgttcaaact aacatcctgt 360
aaagtagaca ctgtaaggag ttact 385

<210> 883
<211> 383
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

<400> 883
tacggttgcg agaatacgac agaagggatg tcaatgcaaa gcccagggct ggaagccaag 60
cgtgggcggc ctctgttcgc catcggggtg aagcctcctg tgttcgttca ctgccgtcgg 120
ggtgaacgcc atatgggcag gtgactgggt gctctcgaac ctccccgcca agcccaaaaa 180
gccacataat taaatgcaat gtcggggccg ggcacggtgg ctcacacctg tgatcccagc 240
gctttgggag gatcacctga ggtcaggagt tcaagaccag cctgggcaac atggtggaac 300
cccgtctcta cttaaaatac aaaaattagc tgggcgtggt ggctcacatc tgtaatccca 360
gcactttggg aggccgaggt ggn 383

<210> 884
<211> 357
<212> DNA
<213> Homo sapiens

<400> 884
attccccagc aagatagaga taatagcttc cacttgcctt ctcaaaacac acaaataaca 60
ttcagtatgt gacagtatta ttaaacccat tatggtccaa tataatgaca cattaacgta 120
cctatttctc aggcagatta tgggatattt ggagcatgga actaagtact aatcatattt 180
tggggtttct ctgtattctc cccaacactt gagttggcac ataagatgtg ttacatagac 240
atttgttacg tgaatgattt gatccttaac taggggtggg acacaaaata ttccaataaa 300
gattatcgca aaattctctt aattcagtgc tgatttcctc ttcagatggc attgtta 357

<210> 885
<211> 356
<212> DNA
<213> Homo sapiens

<400> 885
aaattataga caagcacaaa gaaaatagat atcgccttta attccaccac acagagataa 60
tctctgttaa tatttcagta tgttgttggt aatcaatatc ccatcttttg tgcatatgca 120
gattcttatt ttgtaaacat gagacactat tatgctttct gtgttgtaac ctccttttc 180
acttaatata tcatgaacta ttttccaggt tattaaatat gtgacaaaaa tgtctttgat 240
tcctttataa ttttctgtca catactataa agctcctctg tgattttgca ataaattaac 300
ttgttttgtc actatacaga cgtaagcttt ttaaaaaaaa atcaactcct aatatg 356

<210> 886
<211> 357

<212> DNA
<213> Homo sapiens

<400> 886
cataataggt gctcagtatt tattgaagga aggaatggga aaaggaaaat tcattctgca 60
agaacagtag aatcctactt tggccccacc ttattttatt tgtcacttga cctcagttat 120
cacatctttc tgaccttggg ttgctgttag gtttattgtt aaaacataca ctaaatagtt 180
tatattttaa cttgtaattg ttgtctagct ctggacaatt ggagggccgg gggggtgctc 240
tcctatttag agaacacggg aatacgccgg gcgcgttggc tcacgcctgt aatcccagca 300
ctttgggagg ccgaggcggg cggatcacga ggtcaggaga tcgagaccat cccggct 357

<210> 887
<211> 357
<212> DNA
<213> Homo sapiens

<400> 887
aggagaatca cttgaacccg ggaggtggag gctgcagtga gctgagatcg tgccactgca 60
ctccagcctg ggcaacagag caggactccg tctcaaataa taataataaa acgtatatca 120
ctaataacaa atagatgaga tttaatctct ttagatggga acaatccaat aaagtcctac 180
aataatatag ggcaataaat tttggagagc tttaattact gtgcaagaaa aatattctag 240
ttgaaatgaa gagtctcctt ggcctgttcc cgcacagcag agcaaaccgt cttctccatt 300
cacatttctt ggagttaaga gcctggccca tgctgggcgt ggtggctcac acctgtg 357

<210> 888
<211> 357
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 888
ggggtttcac catgctggcc agggtagtct caaacttctg acctcaagtg atccacccgc 60
ctcagcctcc caacgtgctg ggattacagg catgagccac cacgcccagc ccctccctct 120
attttataga catggaaaca gaggcatggg ggaagttaag tgattttgga tacactgcta 180
aaaaccagtg tatctcaaat gcagtggaaa catggccttg cctcacagga ttaggactaa 240
atgaagtgaa ggatgtaaag aggctagctc aggcccagca catattaggc actcaagaag 300
ggcaggtcct ccctccttct ggcatagggg aatgaaagat gaggtgaggc agggacn 357

<210> 889
<211> 326
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(326)
<223> n = A,T,C or G

<400> 889
ctgggaatac aactgttcca gcaaaagggc ccctgtcttg ggaaggccca ggctgaggag 60
gggaggatgg cccgacctta tgggacatag tcagagacta tgctttcaag cctccatggc 120
ctcccttgca cggcagagaa gtgggtatag aaagtatggt cagggagccc agtggagacg 180
gagctggcca gccaggaagg acctangtat tctgggcagg agggtgagaa gggctccctc 240

ctccaggcct gcccaggccg cctcctgctc caagctccgc tagctgcccc gggctccgct 300
agctgccctg ttccccgcac caccac 326

<210> 890
<211> 360
<212> DNA
<213> Homo sapiens

<400> 890
atagatgaga tttaatctct ttagatggga acaatccaat aaagtcctac aataatatag 60
ggcaataaat tttggagagc tttaattact gtgcaagaaa aatattctag ttgaaatgaa 120
gagtctcctt ggcctgtttc cgcacagcag agcaaaccgt cttctccatt cacatttctt 180
ggagttaaga gcctggccta ggctgggcgt ggtggctcac acctgtaatt ccaacacttt 240
gggggccaa aggggtgga tcacctgagg tcaggagttt gagatcagcc tgggcaacac 300
agtgaaaccc tgtctctaca aaaaatacaa atattagcca cgtgtggtga cacacgcctg 360

<210> 891
<211> 384
<212> DNA
<213> Homo sapiens

<400> 891
tacgctgtta tattacaaca caaggggaac tggctttctt tgattagata actccatgcc 60
atatctaatt tttaaatgcc ttgcatccac acttatcaca ccaaaatact ttaacattct 120
ttaagtctta attcttatct cctcaaggct ttgcgggaaa gagggacagg aataaccttt 180
caccttttgtc tctgatgaca gtcagcgcaa aactacttta tcatcccagc agggaaggcc 240
aatacattcc cagcaagtat aatttctacc agaacaactc atgaaatgtg gtaagaaata 300
gtgtgcgggc gacttaagat aatacttttt aaaaaaaaat agagaacaca gttttaaaaa 360
tctttctttt taaaacgaga tctg 384

<210> 892
<211> 355
<212> DNA
<213> Homo sapiens

<400> 892
attcctacca agtgacaaaa aaatctcaag agagttatca agagagggaa aaagagagaa 60
aacactaatc agcagtgaac caattcctct catatgtatg taaatagata aatcagtgta 120
taatgttaaa taatgatgca gcaattaaaa aatttaaaaa tagtctggga ccaaaagaag 180
taggggattt tgtcaaattc aataaattga ggtaggaaaa ggaataaaaa agtaaaaacc 240
ttttccaaag gtaatttaga gtgaagcagt aaagatattt tacaagtttc atcttttggg 300
cctgagggaa ggcacatttg tggaggagaa atggtggctt gtgttgtttc atgta 355

<210> 893
<211> 358
<212> DNA
<213> Homo sapiens

<400> 893
tagaagcatt tgtgccttga aataaatctc tctttgggga atgagttata tatacatccg 60
tgtgggggga cctatgcaca catactcaca cgcgcatata tattatgcat tacagacaaa 120
atacatgggc aaatccccaa gcaggcagcc ccgagcttct gggagggaag gtgatccgcc 180
tgttagcttc aaaggacatt taaagaatag tgggaaggcc atgcgcggtc gtttttttg 240
acctgggccc atttgtgagc gcgaagcgtg atttattctt cttacgtatg aggtggtctt 300
cgcaccttgg ggccaaccgt cttatgtttc tgccgtttcg ctttcccgtg tatcttcg 358

<210> 894

<211> 355
<212> DNA
<213> Homo sapiens

<400> 894
ggtgcacatt attgaactcc tactgtatac taggatgaac aggagccagt ccttgccttt 60
gggaggccca ggaggtgatg aggaggacag acgagaaaca tgtatttttt tttaacctta 120
aaatctttta tcacttcaac atgtagattt caacattaaa agcgtccctg ctgggcaaca 180
agcagagtgc acaggttcct ggcagggcta agttcttggc gcatagccta cagggttgta 240
ggtcagaggc tgctgggagt cagcaagcac ttgtaattcg cagtgcctcc cctgcccact 300
cagggaggtg atgctggctg gctttaggga cccttcaggt ggggcagaac ccagg 355

<210> 895
<211> 331
<212> DNA
<213> Homo sapiens

<400> 895
gacatgatga aggcaggggc ccaagggagg aggctgtgag gctgtgaggc tcaagctgga 60
gtcttgtttc ctgcggtgcc tcaaccagga cccctgctcc tctcctccgg ctccagcaca 120
acgaagcctc cttcattaag taaacagttc cttaatgaat aaaggaaatg ggataaggaa 180
aaagaaacaa gaagaaaaac agacagaggt gcttttgcca ggcatttaga ctgattttcc 240
cgtttaattc tcccaacctc cagaaatgaa ggttattcca gtctttgtca gagaggtgga 300
gcatcttgct gcagatccca cagcttgaaa a 331

<210> 896
<211> 381
<212> DNA
<213> Homo sapiens

<400> 896
cgttgctgtc gggacaacct tcatttaaag gcactttggc ctttggccag agttcagcgg 60
gccacactca ggctggatgg gctgcagggc tgcaaatttg aaacagcaac aggtgctgac 120
aggccgagca gctggggaga gactggcaca aaggagtgca catgccctgg cccaaaggcg 180
cacccacctc ccagctacag gggactgtgg accctaagtt aagggcgcct ttaaatattc 240
attctcggac ctcattttgg attcattatt ttatattcat ttccttaacc agggcctcac 300
aaatggtatc agtttaggcc ctagaaagcc tgggccctgg ggctgggcgc ggtggctcat 360
gcctgtggtc ccagcacttt g 381

<210> 897
<211> 353
<212> DNA
<213> Homo sapiens

<400> 897
tgggagagag ccatggtaga agtggatctt tcagccccgt caagtcttta catgactgca 60
tccctggtca acatcttgac agcaacctca aagaccttga gcctgaacca cctagccaag 120
ttactctaca attcctaaac cacaaaaacg atgagatagt aaatgtttac tgctttaagt 180
tgctaatttt ggggataatg tgttacacaa caataaataa tacattaacc tgttatgggg 240
ttgaattgtc tccccaaaat gtgtggtgaa ttcctatacc caagtacctc agaatgtgac 300
cttatttgga aataggatcg atgcacatgc aatgatttaa gatgcagtca tag 353

<210> 898
<211> 359
<212> DNA
<213> Homo sapiens

<400> 898
caggcccaca ggcacccacc cccctgcctg acagttggcc taaagtcagc ccaccccacc 60
agagagagct gcgtatagcc tctggcctgc aagcacctgc cccaggattg acaactggta 120
aggtggcacc accccaccat agaaggttac cagcagcagc tacccacatg tgcctgccct 180
tggccttata gccagcccca cctcaccaga gagagttgtg cacaactgtt ggacatttac 240
ccaaccctgg tttgacagcc agcttggaga tggccctgca ccacaggaag ggatcttgtg 300
cagcaaccaa gccatttatg tcttccctgg cctgagagca agcctggagg ggaccctac 359

<210> 899
<211> 327
<212> DNA
<213> Homo sapiens

<400> 899
atgactctct tctttttttca ctgctggtta ttatttgtaa ctcacagggc agaataacag 60
ctctagagct caatttatct ggaggagatt cagcacacct gcttctcttt ttccactggc 120
atggctcttg gtgcaaattt gtatttatgt aatagttaga aattaaacat cagcaccaac 180
agaaaaatat tcaacgccct ttattaaaca tcaaacaact ttgtcaatgg gaaaagctgc 240
cccaactgtt ttagatctta cctctcaaca ttgttgtcaa agtacctttc cactctctgg 300
tagtgtcttt gagagggttt gtctatt 327

<210> 900
<211> 381
<212> DNA
<213> Homo sapiens

<400> 900
cgttgctgtc ggagacttcc caggaaggtc cagcgccctc tcagccttcg tactcagaac 60
aggcgatgat gggcctcagt aacctgagcc ccggtcctgg ccccagccag gccgtgcctc 120
tcccagaggg gctgctccgc cagcggtaca gagaggagaa gaccctggaa gagcggcggt 180
gggagaggct ggagttcctt cagaggaaga aagcattcct gcggcatgtg aggaggagac 240
accgcgatca catggccccc tatgctgttg ggagggaagc cagaatctcc ccattagggg 300
acagaagtca gaatcgattc cgatgtgaat gtcgatactg ccagagccac aggcccgaat 360
ctttctggga tccctggggg g 381

<210> 901
<211> 351
<212> DNA
<213> Homo sapiens

<400> 901
aacacattaa aagccacagt tcagggatat cagagctaga gaaaaactgt caaaaagcaa 60
atgcagagag ccttgaggtt atgtgtggaa tacccacgag gaggaagtcc ttaatcagtt 120
atcttgcaaa gactcaacag aacctgggca taaacccaga cttgagcaaa cactaagaca 180
atggctcctg caagaactgt ctcctctcaa tatttggagt atgtcagata cagcagtgcc 240
tttcagaatg tgcctaacat ccctaaagaa tttgaatatg ccactctttt tttctgattt 300
aaaatttttct tactgttgca aattaagaaa ttaaaaagat gtttaagatt t 351

<210> 902
<211> 273
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(273)
<223> n = A,T,C or G

<400> 902
tatctctaac accactatta aggtacacca gtgttaaggt acattaataa ctacacaaaa 60
ttttatttaa agagaacact tagcagccta tgatagtttt caataaaatg ttgcctctct 120
ttcggattct cactaacttt tgttactatt ctaaaagttt gaatttgctg gggtgtttat 180
tctgaggatt atttaaccat tgttctattt ggcataaccc tatttaatgg tgcttagagc 240
tgaattacct acagaaactg tttctggttt aan 273

<210> 903
<211> 386
<212> DNA
<213> Homo sapiens

<400> 903
cgttgctgtc gggtcttgac tgtagcccag ctcaggctgg aactgctccc tgtccccaag 60
ccagcctccc tgtctctctt caaagagtgt gagtcccttt aggtcctggt gtgtggggac 120
acacctcctt cctcctctgg cccggaggct tcggagcagg agagcctgga gaagtggggg 180
cactgtcggg gctcctcggt acacagacca cgggacagat gcgtggcctg gccctggcat 240
ccatgggcaa aggagagact gagacacacc gatgtgtcac catggcccgg tgcccagcct 300
tgccccagcc ccagctgggg gcagcacgga gtcctcgcac ggggaagtca gtgtggggcg 360
tatgaggacc aacagctggg tcctgg 386

<210> 904
<211> 357
<212> DNA
<213> Homo sapiens

<400> 904
ggtgggcagc caggcaccca gcctgagccg tgaccagagg tccgagccat agatgcagcc 60
ttggaatctc agcctgcggc gctggccctg gtgccacact tagcatgggg gacgccaggc 120
tggagcagac gccatcccaa acaggcgctc tgcccccggg gactttggca aggctgctgc 180
ctacgtgaaa tgatggaaag gtctaggctg gccccaggtc ctttctggca tggcctcagg 240
atcttggcag gaggataaca atgccaggag ggggtgggct gagtcatgtg cctcctctca 300
tgggcctggc tgcagtggtc aggggcaggg tggctcattg tgcgggcacc ggtgccc 357

<210> 905
<211> 358
<212> DNA
<213> Homo sapiens

<400> 905
aagcagtcat gtgattctaa attcaccatt acacccagtg accactgagt ctggaaacag 60
aatatatata gcaatatcca tgtataatat acatttgcct gtgcttctca acttcgtggc 120
caccctttc atacaaacag aaaagctcaa agttggacaa ctcttacctt ccaacaattc 180
ctcaaaatca tccacaaaga actccttcag tggagggcgc tttggcctct tcagggtgtt 240
cagaaactgg tggaatttgg aggacactct gctgttcaca gggacacctg tcacgggaag 300
gacagaggaa cactgaggcc aggacacatc tgaaaaaatg gacacatggg gaatggcc 358

<210> 906
<211> 360
<212> DNA
<213> Homo sapiens

<400> 906
agggtggtca gcgatgctgg ggagatgtaa cctcagaaaa gcaagattaa gttatagcta 60
tcccacaggg caccttcatg caattagaag aaagtgtccc tccagaagat gcagcccccc 120
ccaagggcca tgtcttggca aattcatcag cccttgtata aattataaaa agtcaacttc 180

cctgggtaga tgcagcccca gaggtatatg gctttgtgaa gagccagatt tcagcaccaa 240
ctggcctaca gaactatatg cggtggccct ggttgttttt ttgttaccag atacatagca 300
acttatcttg tgtactttgt cggctctctg tagtgaaaca tgggatttat tcctaattta 360

<210> 907
<211> 382
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(382)
<223> n = A,T,C or G

<400> 907
cgttgctgtc gggggctgcg ggcgctcgct ggtggcggac ccggaggctg ctgcggcgcc 60
ggggctccgt ggcctggatt gaatccgatc gggagccatg agcgtggaca aagctgagct 120
atgcgggtct ctgctcacct gggtaggtcg tggggcgggg ctaggggaag gtgagcgccc 180
gctcctcttg cccgggatcc ctggccctgg ttcggtcagt ctcttggtgc tggggctggg 240
aggtgcgggg tcgtcgactt gctggaccgt tggactctgg cccgagcacc cgcccccgtc 300
acgtggcaag tctgcgtgga aaggacaggt gaggccccgc ccctctgtgg ttggttcacc 360
gtgggcgagg acacaggtga an 382

<210> 908
<211> 381
<212> DNA
<213> Homo sapiens

<400> 908
cgttgctgtc gggcccccga cagtgctacc ttgcttgaga agatgaagct caaggactct 60
ctctttgatc tggatgggcc caaagtggca tctcctttgt cccccacatc cctgacacat 120
acctcccggc cccctgctgc tcttaccccc gtgccccttt cccaggggga cctctcccat 180
cctcctcgaa agaaggaccg aaagaaccga aagttggggc caggagctgg ggctggcttt 240
ggggtgcttc ggaggcctcg gccaactcct ggggatgggg aaaagagatc tcgaatcaag 300
aagagcaaga agcggaagtt aaaaaaggca gaacgggggg atagactccc acctcctggg 360
cctccccagg caccccccag t 381

<210> 909
<211> 380
<212> DNA
<213> Homo sapiens

<400> 909
cgttgctgtc ggacaagaat cccacccttg gccctgacac tggcccttgg ggccttactg 60
aatcaccgca agaacaagat tcattgtggc tttggactca ccatcggctg agccctcctg 120
gtccccgcct tgcaaaccct tccgattgca actccatctc cacctccccc tgccacagag 180
gggagacctg agccccccte ccttccctcc ccccttgtgg gtcggtgggg gacattagaa 240
aggagggacc cccccacccc aacatctgag gaggggattc tggaactgaa tggggcttcg 300
ggagtatgag taccaggggc ttcatgccca gcgggcctgg ggtcccggga gggattgcac 360
aattgagagt gacgcacgag 380

<210> 910
<211> 354
<212> DNA
<213> Homo sapiens

<400> 910

gaggagagtc actacagaca ccaagaatcc attcaggcat gtctttaact tctacttccc 60
ggtactgcct gccacaattt tatcccttag aacccagaac agctgggagc agataaaatc 120
ttcttgggtt atgagttccc agatgatgct gctggcctgc ggactgtact ttgtgaactt 180
atgctggagc agatggatca gaaacccagg ccagaggatg ctcaggaccc atcaagcccc 240
cgcgaggaag gactcagacc cccaacccca ccaaattaaa gcaggcaatg gagaattata 300
ctgaagggat tcttcggctg ggcaaaaaca tgattagatc tgcattctaa agaa 354

<210> 911
<211> 333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(333)
<223> n = A,T,C or G

<400> 911
cctcatttag tgaacatcca attcagaaga aaaacaacag tgaagacatt atgtatttat 60
gcagactaca aatctgatga aagctatact ccaagcaaga cctcagtcag agtaggaaat 120
aattttcaca accttcaaga aattcggcaa cttgagttgg tggaaccaag tggctggatt 180
catgttccct taactgacaa tcataagaag ccaactcgta cattcatgat acagaatgct 240
gttctagcca atcaccagaa tggaagagac acccatatga gacaaattta aatatacaca 300
ccaggtagaa gagagctcca ttggtaaatt tcn 333

<210> 912
<211> 386
<212> DNA
<213> Homo sapiens

<400> 912
cgttgctgtc gcccccacct ccccgttcta gccagcaaca tggatctcct gtggatggct 60
gaagccaaga tgcccaggtt tggacatggc acctttctgc tgtgcctgga aaccatttac 120
cagaaagtga cgggcaagga gctgagatac gagggcctga tgggcaaacc cagcatcctc 180
acttaccagt atgccgagga cctgatcagg cgacaggcgg agaggcgggg ctgggccgcc 240
cccatccgga agctctatgc tgtgggtgat aaccctatgt ctgacgtata cggcgccaac 300
ctgttccacc agtacctgca gaaggcaacg catgatgggg cgccagaact aggggccggg 360
ggcacacggg agcaacagcc ctcacg 386

<210> 913
<211> 245
<212> DNA
<213> Homo sapiens

<400> 913
acagaaccac ttcaactcct tctttctctc caagtgtaca caatgtgaca gggactgttt 60
ctcagaagac atctccttca ggtgaaacag ctacctcatc cctctgtagt ggcacaaaca 120
catccatgat gacatcagag aagataacag tgacaacctc cacaggctcc actcttggaa 180
acccagggga gacatcatca gtacctgtca ctggaagtct tatgccagtc acctcagcag 240
cctta 245

<210> 914
<211> 380
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(380)
<223> n = A,T,C or G

<400> 914
cgttgctgtc gggagcgatg agggtctgag acggtgggag cggttgtgtg aagatggagt 60
ttcccggagg aaatgacaat tacctgacga tcacagggcc ttcgcacccc ttcctgtcag 120
gggccgagac attccataca ccaagcttgg gtgatgagga atttgaaatc ccacctatct 180
ccttggattc tgatccctca ttggctgtct cagatgtggt tggccacttt gatgacctgg 240
cagacccttc ctcttcacag gatggcagtt tttcagccca gtatggggtc cagacattgg 300
acatgcctgt gggcatgacc catggcttga tggagcaggg cgggggggctc ctgagtgggg 360
gcttgaccat ggacttggan 380

<210> 915
<211> 164
<212> DNA
<213> Homo sapiens

<400> 915
cactgctttg taagtctttt cttatttttt catatgtaca tttgactttt ccagctaggc 60
tgtaagttcc ctaagggcag ggtgcatatt ttccatatgt tttggcacct atactaggcc 120
tgggtatata ggaagcaatt aataatattt gttaaggctg gggg 164

<210> 916
<211> 344
<212> DNA
<213> Homo sapiens

<400> 916
agctgggact acaggcgccc accaccacgc ctggctaatt tttttgtgtt tttagtaggg 60
acggggtttc actgtgttga ccaggatgat ctccatcttc tgacctcgtg atccacccac 120
ctcggcctcc caaagtgctg ggattacagg cataaaccat aaaccactgt gcccggcctc 180
ttttttttt ttttattcca tggagggacc tctcttttta ccaaaaattc cccccactgt 240
tgtcctgttc tatttttgtg acactccctg atctcgtgtc gctcgcgtta tccccccgcc 300
cctgttttta attttttttg tagactccgc ctcacccctc cccg 344

<210> 917
<211> 346
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(346)
<223> n = A,T,C or G

<400> 917
catagaggag taattgggta attcctgtgt cttagggaag tctctctggc tcccgaggac 60
agcatactag acacagagga ccaagtagtg ggctcctagt atccttctgg tggccaaagc 120
cttcacagtg aaaatagata ggaagagcca cctcgcctgg cccgatattt gtttttaaaa 180
ggctgggcat ggcttatgcc tgtaatggta gcacttcggg aggccgaagt aggaggatca 240
cttgagacaa ggagtttgag actagactgg gcaacatagt gagagcccat ctctacagaa 300
aaattttgta gggccgggcg cggnggctca tgcctgtaat cttagn 346

<210> 918
<211> 345
<212> DNA

<213> Homo sapiens

<400> 918
gacaactgac tgaaatttaa aaatacttcc caagtccaca tacagaccca tgagccgagg 60
aggaagaatt ataggctcaa agtgtctgag tacaatctct aacaaatcat cagctgacca 120
ctaagctata tagatataga tgttaccect gagaaccctg gatgaaaaaa taacaataac 180
tgagcagaga catcagcagc cacaaatcac aggaaagaaa gtttctaaag ggctaaatca 240
tccaagcaga caaaatatta ccatcaacaa ccagcaggga aaaaaaatca tcataatcca 300
gcgtagttaa aatattattt atcgtgtcca gtgttcaggt aaaat 345

<210> 919
<211> 294
<212> DNA
<213> Homo sapiens

<400> 919
gctccccacc cattcttcac tgaacctcct gctccagcct ctgcctcctc cattttgatg 60
tctagaatca ggggatccag gatcatcacc aaggtcattt tcccagacag atgtgctgag 120
gctgtagaaa gtgcttttta tttggttggg agcttgtgca taaatgcgag aggggctgca 180
catctgacgg actataggtg actcatggct gaaccggaac aggacatcgg ggagaagcca 240
gcagtcagaa ttcagaaccc caaagaaaat gacttcattg aaattgaact gaag 294

<210> 920
<211> 375
<212> DNA
<213> Homo sapiens

<400> 920
tacggttgct agaattcgac agaaagggct acaaaataat caaaacaaat cataataaaa 60
acggaagaaa aaaatatttc agcgttcctt agactcttac aatgtaattc aaactgagtt 120
gtaatttcaa tacacttctt ctgttaatga atgtgcagat aactggttta attttccatt 180
caataaattt ttcttataaa gatgaaggaa ggccatgcgt ggtggctcac acctgtaatc 240
ccagcacttt gggaggccga ggcgggtgga tcacgaggtc aagagttcga gaccagcctg 300
gccaatatgg tgaaaccccg tctctactaa aaatacaaaa attagcttgg cgtggtggcg 360
tgcgcctgta gtccc 375

<210> 921
<211> 351
<212> DNA
<213> Homo sapiens

<400> 921
cagcacacaa acagtggctt atccaggtcc atcatattat tacaaaatta ctattatcac 60
tattatgtaa taactgtttg cttaaaacta ttttgctttc aatgtatttg aaacactttg 120
cttatctaac acattaaagc tataaagtca tataactttc ctctccattt cacaagacag 180
aagataagct cagaagactg gacctatgtt gaatggtttg gctaggatga cagagtcagt 240
atgaggaaga tcttggacct aagtcttctc tttatgtcac tcttttatca ctctgcattg 300
tcagttgtac atacacatta aattgagtgg tgacaatttg ttaggagata a 351

<210> 922
<211> 322
<212> DNA
<213> Homo sapiens

<400> 922
agctatatat atacaacctg caacaggagg gtcgtagaac ccagaagcat tagtcctgga 60
ggacttcctg aaagaggtga gttttggcta agatcctgtc aatgatgctg gcatagacta 120

taagagagga ggctgggcac agtggctcat gcctgtaatc ccagcacttt gagaggccaa 180
ggcaggcgga tcacctgagg tcaggagttc gagaccaggc tggccaacat gaggaaacgc 240
tatctctact aaaaataaaa aaattagcca ggcgtggtgg tggacactta taatcccaga 300
tactcgggag gctgaggtag ga 322

<210> 923
<211> 349
<212> DNA
<213> Homo sapiens

<400> 923
gggacaaaga gctacctggc ctgtaatgtc gatctttggt gattgagaga cccctgcgcc 60
caaagacatc cctaaccttc aggatttaat cctcttcagt caaacgtttc cttaacccta 120
tcagcccatg ttttttcttt cttggtgaaa gctgagcact tcataggctg tttacaggtc 180
cttctccaca ggaaaatact tcctccagga caagaaccct gtcttggttc caaactttcc 240
caattataag agtcaccttt gcgcttgtta aacctgcttc caggtgcttc tcctgagggt 300
ttctgattca gctagactgg agggggggaa ctgacgaggt gggtgggtt 349

<210> 924
<211> 323
<212> DNA
<213> Homo sapiens

<400> 924
aagacttcct ctaaagtgga actagcccaa cctcggtgta cccacctcga agtctctttt 60
atatgttgag tttctaatta ttgatgctag taccataaaa tgaggataca attatcatgg 120
cagccatgag tgaaattttt gtagaacacg atttattaat catctgtttt actgttcaaa 180
aatctattag ctaggacttt ctgccatgtg tataagcctg atttgtggaa taagagaagt 240
ttggaagagt cactatatag gaatcttcct tttaagaggg catatgtttc taatacaggg 300
attttagctg tattattttg gtc 323

<210> 925
<211> 349
<212> DNA
<213> Homo sapiens

<400> 925
catcatgttt gccaggctgg tctggaacta ctgacctcag atgatccacc tgcctctgcc 60
tcccaaagtg ctgggattac aggcgtgagc cattgcgccc ggccttcctg aagtaactca 120
tatctgcttt gtttttttatt cagtgacagc tacgttgaaa aaagtagtta ctttctgata 180
gattccagta ttcacaggat ttaagcaata aaaaattagc aatattttaa ttgaatgctg 240
tcatttttaca aaataagaca ttgaggtgca cattatgggc tagtttgggg gaaaacggga 300
cttaaacaaa ataagaaggg ctggactggt cattgggaat aataaaaaa 349

<210> 926
<211> 293
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(293)
<223> n = A,T,C or G

<400> 926
aaaaaaaaaa aaaaaaaaaa aaaaaaaggg ggcccgtttt ttacaaaaac ccaaacttga 60
aaaaaacctt ggaggggttg gaaaaaccca aacaaaaaag gcgggaaaaa aaacccttaa 120

tttgaaaaat tgggaagcca atggtttaat tggaaccaat aaaaaccgga aaaaaacagg 180
taaaaaccac cattggcttt tttttaattt taaaggtcaa ggggggggggg gggagggttt 240
taancannnn caaccanaaa aatngaggtt ctcattagcc gtgattttat ttt 293

<210> 927
<211> 344
<212> DNA
<213> Homo sapiens

<400> 927
attatatttt taatttactg tggatgacta acacttatta gtattctttt ctgctgccac 60
gaacactgaa agcttctttc tgtctgggtc ttggcaaagt atgaaagtaa ataattcttt 120
aaaatataca tagtcagtcc aagaaaatcg ggagacctca attgagtttg gagtcactga 180
tgtacttcac atttacctta gaaaactgat ctagagtatc aaagaaatta aaaataatta 240
atttttagaa tcacaatgca gtataaatca ttcaaccaaa ctccacactc tagatggcca 300
ttaatttgca agtgaagtag gtcactggga ctcttaatat atag 344

<210> 928
<211> 346
<212> DNA
<213> Homo sapiens

<400> 928
gttgcagtga gccgagatca tgtcactgca ctccagcctg ggcaacagag caagacactg 60
tctgcaaaaa aaaagaaaga aaaaaaagaa aacttgtaaa agtaacaaat gcattccact 120
ggattgctgg tcattgttca atgctcttat aaaccaaagt tatctacatt ccttaaatta 180
acatttggat agaaactgag caaataaaag gaattactgt cattgtcatc aatttcacat 240
tttaaaaaag aaatttgaca attactatat tctctatatt tttcaagaat aatgaatttg 300
gagccgggca tggtggctca tgcctgtaat cccaacactt tgggag 346

<210> 929
<211> 291
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(291)
<223> n = A,T,C or G

<400> 929
ccctattcgg aaaaaaaccc aaactggaaa aaaaccttgg gggggtttg tccccccccc 60
cccaaaatgg ggggaaaaaa ttgctttttt tggaaaaccc ccaatgaaat gggtttaaaa 120
aaaaccctttt tttggggaaa ttagaaaggt tacccccttat tttggccccc ttttattttg 180
caaaaaacag gggggggggg gggtgctttt ttttttttttt ttaggtttcg gggggggggg 240
ggggagtttt ttnnnnnnnag annccccgng acatttctat ctatactatt g 291

<210> 930
<211> 374
<212> DNA
<213> Homo sapiens

<400> 930
tacggctgct agaatacgac agaagggtgt caatggaaac agagcgaacc agtattggtg 60
ttgggttaga tgaggcccta acaagaagtg taaaggggta ggctgtcatc atcttaaaga 120
catttggttc ttactctgtc tccactgaag cttgcgaagg actgatgttg gcaaaacaaa 180
tctggtcagg caagcaaggt tatatataac aattagaaga ggtcaaccag ggttttattt 240

caaaaacaaa tatttactgc acacccacat catgtcagac atggtactaa acagataaaa 300
cacataagca gacatggtcc ctgctcttat agagcttcca ggaagcttat gaatttaatc 360
aaagactcaa gccc 374

<210> 931
<211> 347
<212> DNA
<213> Homo sapiens

<400> 931
cggggctcac tgtgaacgaa ccactcatcc caagcgccgt gaagaacact gatatctgag 60
aacctctgtg atgctctggc tttatctggt ccccttatca tctgaaatgc ttatgttacc 120
cgctccagtt gccttcatac tatgtatgca gggcagggtc aacatacgca aagtcaataa 180
atgtaaccca tcacataaac agagccaatg accaaaacca catgattatc tccatagatg 240
cagaaaaggc ctttgataaa attcaacaca acttcatgct aaaaactctc aataaactag 300
gtattgatgg aatgcacctc aaaataataa gaggtattca tgacaaa 347

<210> 932
<211> 351
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(351)
<223> n = A,T,C or G

<400> 932
cgggtgcgtc tcttgttatc ctctgtgaag cgagccagat ccaactttgc ctttgtgctt 60
atgtgtcagt ctctgctctt tgatggtcac gcctatattg tgtccagact ctgttttatt 120
taatctgtga gttttctttc taaaaacata ttctatattc ccgttcaaga gtggagctaa 180
cttcacagga tttgggaaaa ttctgattat tctagcccat acacagaatg cccaggacaa 240
ggaagacacc acttctctga ggaattgtgc caagaataca agtcggtgaa gtcagcatgc 300
acatgttgaa tgtttacaat gtgccaggta ctttcatata ctattctatt n 351

<210> 933
<211> 374
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(374)
<223> n = A,T,C or G

<400> 933
tacggctgtt agaatacgac agaagggcct agcacaacag agaaaagctt taaacactct 60
taccttgac tggaattaca cacacacaca cacacacaca catacataca cacacacaca 120
tacacacaca cacactatgg ctttcccaca aagccatgat gcatccttaa aaataacaca 180
cagctctgaa aagtgaatgt cgggggtgaa gagagccctc ctacactcct tttcctagtg 240
atgacaaggt tgtgggggca tggctgactg tgaggagcan aagatgagag ggagatatca 300
ttttacttct ttgcactgcn ataataaaaa gaacagatat aatggaagga agaggccagg 360
ggcagtggct tata 374

<210> 934
<211> 344
<212> DNA

<213> Homo sapiens

<400> 934
tatattaatc tagtctatct tagaacaagt taaatagtat atgtacttgt aataacttgt 60
gcctacatat gttagttttg tctattaatt tttctgttaa aaagaatatg cattgaaatg 120
agatggaaaa caaaatgaag agtgcttaaa aaattaaata ttttagaagg atcaatatcc 180
taagggttgt gggtaatttt ttcctacttt ctaaaacttc agattccttt cactcactta 240
aggttgtact accattaatg caatgttttc tgggagtgca agatttgcaa atgaattaat 300
aacagctaga agcctcacta tttgcacttt tataacattc tttg 344

<210> 935
<211> 351
<212> DNA
<213> Homo sapiens

<400> 935
tagcagtagt agtagctacc tcaaaggact gtagtgagga gtaaagttac atacaaagca 60
cacagaactg cacctagctc agagtatgta taataaaagt attagctaat attactgtag 120
tggaaaactc ccttaattca agtgattgta ccttttttac tcaaatacct cctcctcacc 180
ctgcatctcc tgtggctcca tgaaatcaag gccctgccca gaacagtctc tgtgccaaga 240
cagcttttag ctcacccaca ccactttatt tacagataaa ttctgacata cagatgtggg 300
tttcaacctt ggttcctgtg tcctcaacca aaagataagc ttttcagggg g 351

<210> 936
<211> 345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(345)
<223> n = A,T,C or G

<400> 936
ctgtcgccca ggctggagta tagttgcgnc atctcagctc actgcaacct ccacctcctg 60
ggttcaagca attgtcctgc ctcagcctnc caagtagctg ggactatagg catgtgccac 120
catacctggc taatttttnt tatttttagt agagacagga tttcactatg ttggccaggc 180
tggnntncaa ctcctgacct cangnnnatc ctntnacccc cctccctctc tttttttcac 240
cacaatttac tctcaccatt cccctccttt taaatataca aaacaaaaat ctcaactccc 300
cttaaccaat ccatttcctt tcaattaata aattgccaac aaccc 345

<210> 937
<211> 273
<212> DNA
<213> Homo sapiens

<400> 937
agaagggttt catatgggga tgaggagatg tagtttttat ctttttttctg taagaaattg 60
gtggccttca ggtttttttct tacttcttaa tgtggagtgg tcttatcgtg gtctttttct 120
ctggtcacat atttatactt tttgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 180
tgtgtgagac aagggtctct ctctgttccc caggctggag cgcaggggtg tgatctcata 240
ttgtgcaacc tctgactccc aggttcagag tgg 273

<210> 938
<211> 345
<212> DNA
<213> Homo sapiens

<400> 938
actgcgcgcg gcctagctgg aaactttcct gcccagtata tcagtcatat ttctcagcct 60
cactagcatc aggatgtggc catgtttctg gctaatggga tgtcaacgga tatgttcagt 120
gggacttcct agaagcttcc ttaaagggaa gcagacaggc cagaggaggt gcctcatgac 180
tagaatccca gcactttggg aggctgagct gggaggatca cttgaggcca ggagtttgag 240
accagcctgg gcaacatagt aagacaccat ctttacaaaa tataaatttt ttctttttt 300
tttttggaaa taaagtctcg ttttgccccc caggctgaag ggcag 345

<210> 939
<211> 325
<212> DNA
<213> Homo sapiens

<400> 939
gcaacatagt gagacctcat ctctacaaaa atagtaaaaa ttaaccagtt gtgatggcca 60
gtgcctgtag tcccagcgac tcaggaggct gaggtggttg gattgcttga gcctggaagg 120
tcaaggctgc agtgagccat gattgtgcca ctgcactgta gcctgggcga cagagtgaga 180
ccccgtctca aaaaataaaa aaaaattgtg ttttcaattc attgggagct gaactagcat 240
gccaaatata ccttagtaat tgttttatca cgataattat gataataaat tttgttttac 300
agaggcaacg gttcagaata ttcct 325

<210> 940
<211> 352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(352)
<223> n = A,T,C or G

<400> 940
ataatatctg agcaaaattt cataaaatca agacacccat aagtcagggg aaaagatttc 60
tctcctccat taaagaagac tataaaagta ctacaaaagg ttttggtaaa cgattcctta 120
ggaagagttc tttgtttctt ttcttctctt tcaagtgtac aacaggatgg tcagcaagtc 180
taatcctgct gatcgtaagg cctttaatga gacatagggc agcaggtagt ctagatttca 240
aaaggtacat actatttagg gcttcataga ctcagagtca aacctagaat ttgattgtct 300
aatgtatgag tatctagggt aattcataaa aagtggacaa ttctcccagg an 352

<210> 941
<211> 349
<212> DNA
<213> Homo sapiens

<400> 941
aggacaataa atgaaaacta ggactctccc aggctaacta aaacataaca gttagtttac 60
agatagctac ataggaattc caagaaaaac tcagtttggg ttgtcagaga atggtttgga 120
ggaaatcaaa gggctacaat ttataaatgg gaaagttaca agtaaatgta gaggcaagaa 180
tcctgaaatg aacatgtgaa aatacaccta gaaggaatat gttagaatgg gaataaatgt 240
ggctaacatc taaaactggg ctttagaact aaaggagtta agacattttt atagaattca 300
gtcttttggt ctccataaaa aatgaggccg gccgggtaca gtggctcac 349

<210> 942
<211> 347
<212> DNA
<213> Homo sapiens

<400> 942
aactgacttc caagaacaaa ttgttaaaac tttaacagaa aaaccagtta aaggcgctca 60
tcaagagagt ccttttcatt tggtataaat ccaaaactat gaaaatacct tttgtattat 120
gtgcatgcag aaaattaaga atttattcaa tttgcagaaa taaatcagtg atataatgga 180
aacatttaaa attttatctc tggaaaataa tccaaaatca tctatcaaaa attataggcc 240
gggcgcagtg gctcacgcct ctaatcccag cactttggga ggccgaggtg gatggatcac 300
ctgaggtcag gagttcgaga ccagcctgac caacgtggag aaacccc 347

<210> 943
<211> 345
<212> DNA
<213> Homo sapiens

<400> 943
aacaatataa ttacattgta gtgtcttcta aatcccttat tatacaataa atcttctgct 60
tccaaatcat ttttatatag tatgctattt taatgaaata cttttagaga atcaaagaac 120
actggagcta gataggactt taaagattat cgaacaaaac cattcatttt aaggtatatt 180
ggaaacttca tctcacaaaa tcacgaaaca ccccaattca gcaagtcaag tttcagttat 240
cctttagata ccttctaatg gagaaagaac ctgcagcaga tgacagaaat tgtagaatac 300
tacctcacat ctgaataaga attttaaaaa tttccaagca ctttt 345

<210> 944
<211> 352
<212> DNA
<213> Homo sapiens

<400> 944
atagatgaga ggtaatgtct ttacatggca acaatccaat aaagtcctac aataatatag 60
ggcaataaat tttggagagc tttaattact gtgcaagaaa aatattctag ttgaaatgaa 120
gagtctcctt ggcctgtttc cgcacagcag agcaaaccgt cttctccatt cacatttctt 180
ggagttaaga gcctggccta ggctgggcgt ggtggctcac acctgtaatt ccaacacttt 240
gggggccaa agtgggtgga tcacctgaag tcaggagttt gatatatcac tgggcaatac 300
aatgaaacac tgtgtctaca atatattcaa gaattatcca cgtgtgggta cg 352

<210> 945
<211> 353
<212> DNA
<213> Homo sapiens

<400> 945
cgggtaactc acagggcaga ctaccagctc tagagctcaa tttatctgga ggagattcaa 60
cacacctgct tctcttttc cactggcatg gctcttggtg cgaatttgta tttatgtaag 120
aggtagaaag tacacatcat caccaccaga aaaatattcg acgcccttta ttaaacatca 180
cacaactttg tcaatgggaa aagctgcccc aactgtttta gatcttacct ctcaacattg 240
ttgtcaaagt acctttccac tctctggtag tgtctttgag agggtttgtc tattggactt 300
aaaactacat acacaaaggt aagataaagg ttatttacac agccaatctt aga 353

<210> 946
<211> 347
<212> DNA
<213> Homo sapiens

<400> 946
tctgagaatt ttctataaca caaactcctt aacttcctgg tgggtaatgt tttctgggtg 60
ttttttctgt tttctgtttt ttttgttgcc atttcttctt tagtaaaatg aaaattgcaa 120
gtagaaaaga aactaaaaat ggatttagtg tgaggacagg ttccttttcc tggcaggatt 180

gtagaacact ggtattcagt tgactgttca caatgaatat atcttctggt tggtcatggc 240
cagaagagaa aatgtcattg gtttgtgccc aagcaaattg attattaaaa tacgttgaat 300
atgaccccat ggttgcaaac atccctttcc ttagtaattc ttagaga 347

<210> 947
<211> 345
<212> DNA
<213> Homo sapiens

<400> 947
tttggtattg ccgttattat tgttgttaaa ctgactaaaa tcatacatgg aataatagaa 60
atcaggccta acatcagata gacttttcca ttcagttaag ttattgtgta gcaaaattta 120
ttttgtcagt tcactacaca atgtgacagt atatagtttc tctaatagag taacattaaa 180
gaggacatat aatataacca aaaatttgag ttccagataa gtttggtgtc tcactagcaa 240
gatgacgtta aataactcat ttaatttttt tgaaatctta attttctgtt ctgtaaaata 300
aaaagcaatc tgtctcttgt ccaaaagact atgtaggttt tttaa 345

<210> 948
<211> 348
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(348)
<223> n = A,T,C or G

<400> 948
ggaaacgtgg aattttacag ttacagttcc attgagtcaa atcccatttt atatatacat 60
aaaaattaag ttctgagtga gttctagcta aatataagtg cgactgtaaa cgcagccaat 120
ttttttaagc agaatatgag aacacctaag tattctcttc atagcagttc ctataaaggg 180
attaaacact tatttctgtg ttatggntct tattcatata tttttatagc acctttttt 240
ggaacctata tttgtgcttg aaggtgtttt tgatatttgg aaacagtata agccatttgg 300
agtcatgatt ggtgggcaag tggattcaag ctaaaatact aagaccan 348

<210> 949
<211> 318
<212> DNA
<213> Homo sapiens

<400> 949
gtcatcaaca tcctcattgt catggcaaat tgtgagttta tctttgccag cgtcagatag 60
ttcatcaact tccttttagc cagattgcaa aaagtcccat gactctattt ccaactccaa 120
tgccatctga catgagacaa aatcagagta gattaagata gtggtcttaa ctgaatgtag 180
ataaagtatg ctacttgtgc aaatttttca gaaatatatg accatatgaa catgttgctg 240
aggccttgcc aggccttgaa aggggcctgt gcaagtgagg ggcacagaga ttaagtttta 300
ttagcttctc agagattc 318

<210> 950
<211> 351
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(351)
<223> n = A,T,C or G

<400> 950
cggggagcca ctttgacaac gctcctgtgc catgcgtgac catgacctgc tgataaggat 60
ggacatcctg cctagtactc aacctgctgc ctttactgct ggtaggagtc gttctcactg 120
cgacacctgc taattgtcat attatttaga ggaagaccaa ttgtctcaaa agcccatctc 180
ttgctttgag tggtggttcc cacgaattat aggagcaggt ctgatggcca ttccagcaac 240
aacaatgtcc ttgacagcaa gaaaaagagc gtgctgcaac aacagaactg gaatgtttct 300
ttcatcactt ttcagtgtga tcacagtcat tggtgctctg tattgcatgc n 351

<210> 951
<211> 348
<212> DNA
<213> Homo sapiens

<400> 951
tgatactgag aaacaagtaa tgaagcttaa aagtgctgct tgtgctctgt gccaaaggca 60
gcagagcact tgtctctggt ctccatatac acttgacata tttaccttca gtattctgag 120
gaagattttg attcatttca cacggaataa cactcaccta ccatgcttaa attaccgtac 180
atattgtgag actttattga tcataaataa gttactctca accttgagat ctggcttcaa 240
ttttctggat tctcattctt tctcctttat atcagaagct tcataatага caatgggggc 300
aaatatggtg tggagaaata atcagtttat atttagatat ttttaatg 348

<210> 952
<211> 324
<212> DNA
<213> Homo sapiens

<400> 952
ggacctgtcc cctggggctg ggtcctcact gcttccctgg gactggctgt gtaggggttg 60
atgtgggcag tcagaggggg tagggagaga agggtttggt gtattgcaca cacaccaaca 120
ctcactcaga catgatccat gcacacacac acacttgagc atgatgcgca catatatacc 180
acacaaatat acaccatgtg cacacacacc acacacacat ataccatgca cacacaaaca 240
caaagacaca tcatgtacac agacactcaa acatatgccg tgcatacaca tacacatcac 300
acactcaaat atacaccatg ttca 324

<210> 953
<211> 373
<212> DNA
<213> Homo sapiens

<400> 953
cgttgctgtc ggccgggatg ggatgtggcg ccttttccg ctcgccctcg cgccccccc 60
gccccgcgca gctaaattcc ggcggagggg cgagctggca ggccggctcc tcccactctg 120
ggcagcgggg tcccgcgtcc cctcccccac tatttggcag cgtctggggg tctggggcag 180
cttcgttcat tcacccgggg gagttgggct tccgggaagg gtcggaagct cctccctcgc 240
ttcctggagg gtaatggggt ggtgcctttg actccggggg tggaaaagcg accccacatt 300
caaggacgcc aatggcatgt tgagctttcc caatctaaac caggtgcgtg gagggaagca 360
agtgcttact ccc 373

<210> 954
<211> 379
<212> DNA
<213> Homo sapiens

<400> 954
cgttgctgtc gaaagacttg gagaagattg ctcccaaaga gaaaggcatt actgctatgt 60
cagtaaaaga agtccttcaa agcttagttg atgatggtat ggttgactgt gagaggatcg 120

gaacttctaa ttattattgg gcttttccaa gtaaagctct tcatgcaagg aaacataagt 180
tggaggttct ggaatctcag ttgtctgagg gaagtcaaaa gcatgcaagc ctacagaaaa 240
gcattgagaa agctaaaatt ggccgatgtg aaacggaaga gcgaaccagg ctagcaaaag 300
agctttcttc acttcgagac caaagggaac agctaaaggc agaagtagaa aaatacaaag 360
actgtgatcc gcaagttgg 379

<210> 955
<211> 347
<212> DNA
<213> Homo sapiens

<400> 955
ggtcggcgac gcatcgcgcg atggcgcggg cgggacagtg cttgtgaaac tgaacacaac 60
aaaagtatgg atatgggaaa ccaacatcct tctattagta ggcttcagga aatccaaaag 120
gaagtaaaaa gtgtagaaca gcaagttatc ggcttcagtg gtctttcaga tgacaagaat 180
tacaagaaac tggagaggat tctaacaaaa cagcttttg aaatagactc tgtagatact 240
gaaggaaaag gagatattca gcaagctagg aagcgggcag cacaggagac agaacgtctt 300
ctcaaagagt tggagcagaa tgcaaaccac ccacaccgga ttgaaat 347

<210> 956
<211> 337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(337)
<223> n = A,T,C or G

<400> 956
cctgcctttt tataaaatat gacaaattgg ccatttgtag gacatttctt cggtttctaa 60
caaactaaca gaaaaattaa tcttgactgc aatagtaaat tcctcttata atttagtgcc 120
aagaaaaaga aacttttcag aaaacgtgaa aaccacctct gcttcctggg ttcaagtgat 180
tctcctgctt cagcctccca agtagctggg attacaggca cgtgccacca cgcccagcta 240
atttttgtat ttttagaaga ggacgggttt naccatgttg gccaggctgg gttcgaattg 300
ctgacctcaa gtgatccacc cgcctcggcc tcccaaa 337

<210> 957
<211> 339
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(339)
<223> n = A,T,C or G

<400> 957
ggaaagctga catcagttgt ttccttactc tatttcaagc ttttttttt tttaacacaa 60
ttaacggggg ccatggaacc ctggccaggg cccttggagg ccgagggtct tcagtggaaa 120
ccgagaaaac taaggtttgc aggcaggcgg gggcctttcc gaaggcccgg gttggttttg 180
ccaaccaaat ggggtttcaa aagaattggg ggggaaggaa agaaaacata ggccttggac 240
cccaaatcaa acaaaccgcc aaatggaaaa aggtttgggg gccccccaga cccttaaaaa 300
ccaattcaaa aggttctaac atggaatttt aataacaan 339

<210> 958
<211> 206

<212> DNA
<213> Homo sapiens

<400> 958
cccagggacc acagtttgga tatgcttggc atagttgcta aaaatgtatt gagtgataca 60
gttagcattt gtgcgcttta tctagccagg ctctctagct tttgtttttg aaacacgtat 120
gcagtggttt gtaacacaca ttgggatttt tcaaggacaa tttttaaaaa ttactgtttg 180
ttggacaggc gcggtggctc atgcct 206

<210> 959
<211> 338
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(338)
<223> n = A,T,C or G

<400> 959
gctgggcagg ggtaaagtaa ggtaaaatag agatcaggcc tgcagaatcc ctgcgaagac 60
aaaaccactt agtgaactca acctttcttg atttgcaaac ctaaggaaaa cttaacttga 120
gctaactctt acaaatgcct gtattacaga aaaacagagc ttaagctcaa ccaatcagag 180
gtagccaaca aactttcata attaggaacc ttcataggag atcaatcaaa taaggcaatt 240
gtgtaattat atccaatcaa atgtttgctt tgctttacct ctgtttctgt cttataaagg 300
cctccccata gattcccttg gtggagttcc tgaaccan 338

<210> 960
<211> 343
<212> DNA
<213> Homo sapiens

<400> 960
tctccaatga aggtactttt gctaaggtgt gtgaagatac ctgttgctgg gatcaggaga 60
catgaaaaaa ctaagaaaaa aaatactgag aaaagttttc aatagctttg taagccttca 120
gaatgtaaag tacattaaga aataaaaact taaatgcagt gggtacaaac atggcaaatc 180
tgaaagctaa acctgactaa ggctatcaac ctgccatgtg ctaaaaacaa atgtactcac 240
tcagaaaaac tgaaagaggt actacatacc tattaaaaca gctaaattta aacagtgata 300
atactaaatg ccgacaagta tgcaaagaaa ctggacttct cat 343

<210> 961
<211> 341
<212> DNA
<213> Homo sapiens

<400> 961
tgcatccgga aggtggaggt tgcagtgagc tgaaatcaca ccattgcact ccagcctggg 60
tgacagagtg agactctatc taacaaaaaa aagaaaagaa aaagaaaatt tcttttccta 120
gtttattgga aattatttta ttaaaagggg atggagaatt aattgtatca tcaaaaaaat 180
atcttttaaa aaaaaaggta tcacaggagc catccatctc aaaaaagcag ggaaaaaaaa 240
tatgagactt tcaatattaa aaatgaccaa atattaagat tggcttctct ctctttcttt 300
tcattaactg acgctaacca ttagaggaca ggtgactcta g 341

<210> 962
<211> 202
<212> DNA
<213> Homo sapiens

<400> 962
ttagatgatg gatatctaga ggtgtattat atcattggct ctattttgta tgtttgaagt 60
ttccatagta taaaacttag gaaagttaat ttaaacagac aaatacccca tcatgaaaat 120
ggataatcaa aaggaactct tgataatgaa agaactaaaa gtggccagat gttttcaaat 180
gcttagcttt actactaatt ct 202

<210> 963
<211> 339
<212> DNA
<213> Homo sapiens

<400> 963
cctggatgac agagcaagac tctgtctcaa aaaaaaaaaa aaatttttt ttagcccctt 60
tgtggtgaac cttcaaaccc cctaaaaaaa agagaagatt tttttgttgg ttggtttctg 120
aaacagagcc taactttgcc gttcaggctg aaggactttg aacacttctg gttttttta 180
aactgttacc accaggtgtc tacaactgct gaccccactg tggtttaaat tctattcaaa 240
acagacatcg gaggctctga ggctgatctc atgtgccccg tgagaacatt tggaatttga 300
ggaagaggag actggccttg gtatgccttg ccatcacct 339

<210> 964
<211> 342
<212> DNA
<213> Homo sapiens

<400> 964
acatggtacc taagatacta gaatacattt ataaatattt gttgaggaac taattataaa 60
gactattcca ggtgctttag ggttcagcca caacctatta taagtaatac ctattataag 120
tgggtgcttg taatagatat taccatatta tctaagcact cactttaata ctcattgttc 180
tgggctccac ctgatgttat gatatgaatc tttttagcta tactctgatc cagaagatca 240
catgattagc atcaatttct aaggacagta ataaacttga tagttctgag caaatacata 300
cactacagaa taggcattca acaaatattt attggctgcc ta 342

<210> 965
<211> 309
<212> DNA
<213> Homo sapiens

<400> 965
gtgggagctg agggcaggga tcaggcctgg agggaagcag gcccagaggt gggcaccaag 60
gaggagatgg agggagcttt gtcccatttc tctctgagtc ttggccccat cttggaaacc 120
tggccccaga ctgccattct tgaatatgtg ataattactg ctataattgg tggagcccct 180
gcaaggggct tcatactttg cctcacttaa ctttcacaac tactagaaga gcgaggccct 240
cttatctctg ctttcagatt aaggaaggga gatgcagggt gatgaaatca cttgtccagg 300
ctgggggca 309

<210> 966
<211> 336
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(336)
<223> n = A,T,C or G

<400> 966

tttgtatttt taatagagat aggttttcgc catgttggtc aggctggtct cgaacccctg 60
accttgtgat ctgcctgcct cggcctccca acagagcagt cctgatgagc cctccccgta 120
agaaactgct gaaatgttgg ggcggctgta tgtttttgtt ataaggaaaa ggtaacattt 180
gtggaaggca gtacttcaca gtgatacatt taatggttgc atattcaaat ctcaaatgag 240
attactagta atctagagca ggtgtttctt atcccagaaa gttcttaaag ttctcagaat 300
tagttctctt gagacaagag ccatattttc ctgtan 336

<210> 967
<211> 339
<212> DNA
<213> Homo sapiens

<400> 967
ttttgcagta tgtgcatgca ttttctattc acaaaaatga aatttttaa aaaaggggc 60
agtacttagc acaatgccta gcagtggtgg cggtggtggt gatagccttt ctgcagctct 120
gggcagatga ttcactgcag aaatgcagcc cagagatatc tagaggctgg ccatagcctc 180
cagactgtcc tcctagcctc tcggtctccc ttcttcattc tatatgatcc atgtttcccc 240
atcggagaat ctttgcattt tagagatgta aaggggcttc agattttcta gtgcaactgt 300
tttaacggtg aagaaactaa gcccccaaaa gatgccatt 339

<210> 968
<211> 340
<212> DNA
<213> Homo sapiens

<400> 968
ggacactgga ccaaatgtct gatcagctca tcacattgtc cacatgaaat ggaccgtctt 60
cctcagttca aaataatcaa atgatagatg gagaattctg aaagttagga gctacaacta 120
tttgaaataa aactctagtt acatatttga accgttcaag gtaggttgtt taaaagcagt 180
ttgttcacaa acaggtatat acacagtaga gtaaatttgt tattttagca aacgcttatt 240
tagctcatgc tgatttaatg agggttcctt tcatgatact taatagttat aagaacattt 300
tttacgattt tatagttaaa catttctttt gcataccttg 340

<210> 969
<211> 337
<212> DNA
<213> Homo sapiens

<400> 969
cgattctcct gcctcagcct cccaagtagc tgggactatt tttgtatttt tgtatttttc 60
taattttgta tttttagtag agatgggggt tcaccatgtt ggccaggctg ttctcaaact 120
cctgacctca ggtgatccac ccatctcgac ctcccaaagt gttgggctta taggtgtgag 180
ccactgcacc cgaccgcctc catcatttta tattaccttc agcaacgtgt gggggatgcc 240
ctgtttgcac ttgcttatca acactagata cttgcttatt ttattaacgc tatatgagag 300
ggtcaggtgg accggcattt ttacccgcct aagatcc 337

<210> 970
<211> 338
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(338)
<223> n = A,T,C or G

<400> 970

tgacctttg atcccatcat gggactgttc cccagcccta ggccactgga atgggggaa 60
atagaaccct cctttccttg ttcccactct tgtttctttt gaacatgggt tacctccctt 120
cgcgtctttt ggaacagaag gggatcataa gctcttgagt ctctgttttc tgctgtcatc 180
tactcttcct gcctctggca cctcccagct cctgacttcc tcctgcttcc ccctggagcc 240
agagacgtgg ctgggaagag cccctggcct ttgaagccag tggtggtggt gaccaggggc 300
aacaggccac tgtgctcctg gatgcgtggt ctgccagn 338

<210> 971
<211> 340
<212> DNA
<213> Homo sapiens

<400> 971
gaataaatca acatcagagt tttataaatc agagtgtctt tgtactctac aaattagtat 60
gcttaatata caacttgaag tccttcagag aaaatattaa acagaaatgc cttctaccca 120
gagatatgaa tgtgcctttg caataataaa gaagagacta aaaattgtat agcaatacct 180
agtatctgac caatacatta tttcacaaaa ataataaagt atcttgcatc atacatggaa 240
gacagtgact tattcctgaa tctactatat ctacagactt tcttgtacca aatatttact 300
ataagtacat acaactatgg aaaatgctat gctatgcctt 340

<210> 972
<211> 341
<212> DNA
<213> Homo sapiens

<400> 972
atttaccgat aggtgtggga gggcaaccaa cattttattc tatacccttt tatgcttttt 60
gttgtttgaa ctatgtccag gtgttatatc tattaaaata gtatgaattc aatggcttac 120
tctaaggaag accatgatca ccagcatatg agaggcagac gaaacgctat ccacagcaag 180
atgaacacct acacagcagg gagaacatgg gaggattcaa ggtggtaaga aaatttaata 240
caagtctagg cctggtgtgg cggctcacgc ctgtaatccc agcactttgg gaggctgggg 300
cgggtaggtg acctgaggtc aggagccaag accagcctgg c 341

<210> 973
<211> 342
<212> DNA
<213> Homo sapiens

<400> 973
ttttcttgat gtctcataac ttctcctttc tcttcccaca ttccgaaaat cctcctatcc 60
taaccttgct acatgaatgg taactgcttg aacacttgtg attggaatga ctgatttaaa 120
aagcccagtt ttgaggtagg gcgcagtggc tcacgcctat aatcccagca ctttgggagg 180
ccaaggcggg cagaacacga ggtcaggaga tcgagaccaa cctggctaac atggtgaaac 240
cccgtctcta ctaaaaatac aaaaaattaa cctggcgtgg tggcgggcgc ctgtagtccc 300
agctacttgg gaggctgagg tgggagaatg gcgtgaaccc ag 342

<210> 974
<211> 339
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(339)
<223> n = A,T,C or G

<400> 974

actaagcaca attagaaatg tcttggttta tatatttctt cccatgcttt ctgtctctac 60
aaccagaata taagcttcag aacaagagta ttcaaatctg gtgtgtttat ccccagactc 120
acaacactgg gtccagagca ggtcctcagt agatgtttat aaatatcagg atgtattaca 180
tatattaact ttttatgagt agttattatt tattatattc cacttagata tggaattatt 240
acttcaggtg gtagctgact tgtactggaa aagtgactga gcccaactct aatgctaatg 300
ttaattggat ttatatgaag tttctttggt ttaattgcn 339

<210> 975
<211> 341
<212> DNA
<213> Homo sapiens

<400> 975
cctatcacac ccattcataa agatcttgcg taggtgattt gggtttacca tttttgtcta 60
aacttttcct catgtgagtt ctggataatg gactccgatt tttttaaaaa tggtaaaact 120
aattgaacat atcagtcatt tgtagttgga gaaaaaattg acttgctttc tatatgttaa 180
gtctagacca ttttgccctc tttgtaaaat gtgatttgtt tttgtatatg tttagtaatt 240
ttatgagcta tttataactt actgggaatg atcagagaac agggttcttt ttttttttt 300
taaaaggttt ttggcctggc gcacaagtct cacaccttaa t 341

<210> 976
<211> 310
<212> DNA
<213> Homo sapiens

<400> 976
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agaaatgaaa ctaactgcag aaggtagaca gcctaaatgg gagtagctct gccaagtgtg 120
tgagctttta aaaaaatgta tacaattttt ttggcttttc taattcatac taatgattct 180
aaattacaaa gagaagccat tctgcttcag attttggaaa tgagtctaat gttaactaaa 240
aacctgtgac ctgatgagga ttttgataac tcctctacca tatttgttta cctggctcta 300
tttcgaataa 310

<210> 977
<211> 342
<212> DNA
<213> Homo sapiens

<400> 977
tacaacaaag caataatgcc aggctagtct catgccctgt gaactaatta cagaggttgc 60
caacctcaat gaaccacagt gaacaacttt agatccacag agagtctcaa cttataaaat 120
tcattaaata gaaatagatt cagaactttt cacttttcag tttggcagta cgtgttgata 180
cagattagga aatgtttcat tttatggccc tatataaaat taagtgtttt tttcaacttt 240
attgaggtat cggtcacata ctatacaatt caccctttaa aaatatataa ttcagggccg 300
ggtgcagagg ctcatgcctg taatcccagg actttgggag gg 342

<210> 978
<211> 339
<212> DNA
<213> Homo sapiens

<400> 978
caaatcctgg atagtttaat ctcttcaaag aggaaacatg tggttttctg ctagggcata 60
gaaggagatc aggggcttag ctgtttcttt taaagacttt gaaccaattc tcctactttc 120
agttttatgc cttactattt tcttaaagat acctgatacc tgcaattctt gggcatttgc 180
atattgctgt ttgatgcctc ctgtccccaa acagcactta gctttttgtg tttatttttt 240
aggtcaattg cctcttactg atttgttttc cagttcctaa aacttgctgt attatgggag 300

agagttgaga taaatgcaaa tactcagaag tattttgtg 339

<210> 979
<211> 231
<212> DNA
<213> Homo sapiens

<400> 979
tcattcagcg tagagcatgt ggaacacagt ggcttcctag ctaatgtttg ctgaatggaa 60
tagaattttg aatacaatga gccaaatttc tttactatta gaggattttg ctgaatggtt 120
aaaatcaatg caaaatgagg aatcaaagtt tttgattagg tattacacat gaaaccagga 180
agagggagaa gtacctcctt taatgtgcat acagagaagg taacccatga g 231

<210> 980
<211> 341
<212> DNA
<213> Homo sapiens

<400> 980
agtatctaca taaatcattt ggaattcttc taaacagact tgtctgtcct ctgccattta 60
tttatgtgga attattatta ttattattat cattattatt cagaggtaga tatattcttg 120
aaggaattat tatttaaaaa atcacagcat cccaatactt tgtttcccaa agaaatagat 180
atgttcacat tatgagtaaa gactgttttt gaacttgctc taaaaaatat ctggtttcta 240
cattgcagag ctgagatttg tgaagaatga ggcagaatta aagttttggg gttgagtgct 300
ttttaaaaat tgggtattta ttttacttat ttatttttga g 341

<210> 981
<211> 337
<212> DNA
<213> Homo sapiens

<400> 981
tctgagaatt ttctataaca caaactcctt aacttcctgg tgggtaatgt tttctgggtg 60
ttttttctgt tttctgtttt ttttgttggc atttcttctt tagtaaaatg aaaattgcaa 120
gtagaaaaga aactaaaaat ggatttagtg tgaggacagg ttccttttcc tggcaggatt 180
gtagaacact ggtattcagt tgactgttta caatgaatat atcttctggt tggtcatggc 240
cagaagagaa aatgtcattg gtttgtgccc aagcaaattg attattaaaa tacgttgaat 300
atgaccccat ggttgcaaac atccctttc ttagtaa 337

<210> 982
<211> 339
<212> DNA
<213> Homo sapiens

<400> 982
tttgcctgaa attgcacgtc agcttcattt cctcaccccc tccccaatca ttcttaaaca 60
ccttcgaact gaaaatttta attctgatta gtttatctta acaaacaatt tagagaagga 120
ttggtgtcca aataaactgt atgatgtgga acttgcccca aatgaagagg aagttggcat 180
tccatagcta gacagtagca tttccagctg tgggggtgcc agagctgagc caagcaggcc 240
tgctcagcag agacttggga ttcaggcttt gtaagaactc gtgttggcaa cccgttccct 300
gtgttgcagg cataaaccca agagggtttt aaagatcaa 339

<210> 983
<211> 339
<212> DNA
<213> Homo sapiens

<400> 983
gtttcaccat gttggccagg ctggtcttga actcctgacc tcaggtgatc cacctgcctg 60
ggcctcccaa agtgctggga ttacaggcgt aagccaccgc gcccagccaa gtaaaattaa 120
atattcttgt attcttttta tatctctgga aaagtattaa atacattctt ccagaaaaac 180
cttcgctgaa gggcttggct ggactagttt cccacagctt atccctaggc ctctgggtag 240
aattggtttt ctttaatggg gggatagatc aaacatcata cggagaccaa caaggttttt 300
tggttcttct taaaagccac tgggaatctt cagaacaag 339

<210> 984
<211> 342
<212> DNA
<213> Homo sapiens

<400> 984
ctgttttgtc ctcattaacc tgtaatgctt gactttcata tttctttact gccatatgat 60
atagcagaat agagttattg atttcaatgg tgcacaatat tttgattact aaaaaatacc 120
attttccccc gatgaattga ctgatgtttt aaaaatccat ccaacaagta actgttgaat 180
cctataatat acaatgcttt gttaaggcaa atggtgaatg caaaatagtg aacactataa 240
tctctggaaa ccaaataaaa agacttcggg tctcagaagt atacagcaac tacatatttt 300
accaccaacc acatgcccaa ccaatggtat atacaaatta ac 342

<210> 985
<211> 340
<212> DNA
<213> Homo sapiens

<400> 985
gtctcacaat gtcaccatct acaatgcatg ccagctgtaa acaatcactt gcaattccac 60
aaacgtacca tgcttttctc atctcccatc ttaacaataa cagttctaac atataatact 120
ggttacagtg tgcctggtac tatgctaagc atattacgtg atgatctcat ataatcgtca 180
cagcaatcct gtttcctttt cctggaatga cctgccccac ctattaattc tctcactccc 240
cacacacatt tagccagcaa actcctattg agctaacagc catcatccat cccaccactt 300
attccaagca ccctttcctg cctcccactg ccacccttct 340

<210> 986
<211> 337
<212> DNA
<213> Homo sapiens

<400> 986
ggaaaatgga cgacacacct atctctgaaa acaacatgga agaaacaggg tctttggatt 60
ctttttctat taacagccca ctgaatatta caggatcaaa ttcatcttat gaatgtacaa 120
ttgaaaattc actgctgaag caaacatgga cagggcgctg gacgatgaaa gatggccttc 180
ataaaatgca aagtgaacac gtttcactct catgtcaacc tgtaaatgat tatttttcac 240
caaaccaaga cttcaaagtt acttggtcca gaatgaaaag cgggactttc tctgtcccgg 300
cttactatct gagctcctca caaaatacaa ttatcaa 337

<210> 987
<211> 311
<212> DNA
<213> Homo sapiens

<400> 987
gttcttatga accttgaagg ttgttgtaaa ccgtccaaat ttcagaaaaa taccgattat 60
ttctgaatag aaatccaaat atagatgctt acggttagat tgagcctgga ttgccctcaa 120
ttaagaacaa ttgagttttt ttgttgctcg ttcattttac atgtcgtatt ggtacatggt 180
acatgtacta gtggttttcc aaagtccatg attttagtat cttatataag aaattaattg 240

tcagccgggc gcagaggctc acgcctgtaa tcccagcact ttgagaggcc gagacaggcg 300
gatcacaagg g 311

<210> 988
<211> 341
<212> DNA
<213> Homo sapiens

<400> 988
aaggtagaga atgctattca gttagtcagt ttaacatacg agattgtcaa ctcaatagct 60
cagaggggcc agaaatacag atttgctggc ttctggcttg ggtggtagtt gaagtgcatg 120
ggagagggtg agtttgccca atcaggccgc gtacagtgag aagggaagaa ggctaaagat 180
gcaggcctaa ggaaaatcag cacttaagca ggaggaggaa cagccaataa gagatcaaag 240
gggaaagttt tattttatgt tggatttttc ccccccttaag atgagctagg acaggtgtgg 300
gggcacatgc ctgtaatccc agcactttgg gaggctgcgg t 341

<210> 989
<211> 370
<212> DNA
<213> Homo sapiens

<400> 989
actacgattc ctacataaca acaaacggag ccgggtgggg acgcaccaca aatacactgc 60
gatgacccta cagctgaatt cgtgaagcct gggatgctac cgctatacct tacaccatga 120
taaaccgcag aacacggctg acctgctaca cccgccttca tagcacactc taggtccaaa 180
tacaggagtg ataggttcac actggctagc cccagagtgc cacccgaggg caggcctggc 240
tgcccacaaa gaagaggtag atttgggggg ctgtgtggag ccagcatgag gcaaggcata 300
gccaggacca gaggcccagg gaggccacag ctgacttgct gggtgctgca gggctgttgg 360
aggctcccac 370

<210> 990
<211> 337
<212> DNA
<213> Homo sapiens

<400> 990
atgtcaagct cagttgaaca gaaaaaaggg cctacaagac agcgcaaatg tggcttttgt 60
aagtcaaata gagacaagga atgtggacag ttactaatat ctgaaaacca gaaggtggca 120
gcgcaccata agtgcatgct cttttcatct gctttggtat catcacactc tgataatgaa 180
agtcttggtg gattttctat tgaagatgtc caaaaggaaa ttaaaagagg cacgaagctg 240
atgtgttctt tgtgccattg tcctggagca acaattggtt gtgatgtgaa aacatgtcac 300
aggacatacc actaccactg tgcattgcat gataaag 337

<210> 991
<211> 343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(343)
<223> n = A,T,C or G

<400> 991
gaagtcgtgg aagcgtcggc gacgcatcgc gcgatggcgc gggcgggaca gtgcttgtga 60
aactgaacac aacaaaagta tggatatggg aaaccaacat ccttctatta gtaggcttca 120
ggaaatccaa aaggaagtaa aaagtgtaga acagcaagtt atcggcttca gtggtctgtc 180

agatgacaag aattacaaga aactggagag gattctaaca aaacagcttt ttgaaataga 240
ctctgtagat actgaaggaa aaggagatat tcagcaagct aggaagcggg cagcacagga 300
gacagaacgt cttctcaaag agttggagca gaatgcaaac can 343

<210> 992
<211> 332
<212> DNA
<213> Homo sapiens

<400> 992
aaacattcat caatttggcc cagacaaaag tattcttgct tgctttagga tttactcaac 60
ttgttctaat tttaaccttc tgttgcttta aaatatggta atggatttgt tggttgttga 120
aggaattgaa tgtgattgtg gtgttacatc ttttcttata ttaaaatctt taattctaaa 180
atcagtatgt cacatacatt accacattaa cacatcaaga ctggaaactg atgattggaa 240
cagagacaaa tgtgttggtg agttgtggtg agctgtcaag ggacttatgg actatagctg 300
tcctatagtc tataacgagc cagctgaaga tg 332

<210> 993
<211> 332
<212> DNA
<213> Homo sapiens

<400> 993
taaatgggat acacgtcttc ttaagtaatt caaagtctag taggggaagc agaaaggtaa 60
caaacaatta agatacaaaa gtaaaacaaa agccctctgt agagtgctcc aacatctttt 120
attccttatc atctccccaa attccaattt gctgcccctа tatgcccttt aaaaaaaccc 180
aggccgggca caacggctca cacctgtaat cccagcactt tgggaggctg aggcaggagg 240
atcacttgag gccaagagtt ggagaccagc ctggctaaca cggtgaaact tcgtctctac 300
taaaaataca aaaattagct gggcgtggtg gt 332

<210> 994
<211> 327
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(327)
<223> n = A,T,C or G

<400> 994
gtagacagtc caaagcagca tcagacacat catgagtgct caaactgtac atctgcttcc 60
ctggtgattt ttctttcaat ggccaaagga tagaggcagc ggcaattcca ggtgtgctgt 120
gagccaactg tgtgagcctg ggcgcctact taacctccct gagtcctctt ctataagtga 180
gcattctaat agtacctagt tcacaagttg tcctgaagct taaacaaaat agcaaaatga 240
tgctttttaa aatgacaata caatcaagag gacagaacag gtaaagactt tgtttattca 300
caaattgctg gtattgattg aattggn 327

<210> 995
<211> 335
<212> DNA
<213> Homo sapiens

<400> 995
tgctgatgcg gtggtactac agaaagagac gcctgactta catattccac tcgtaactgc 60
atctgtaaga actcaaatca cctttgacat taatttacga ccaactgcat gccctacata 120
attgagacac ttgggatcgg gtggaaaaag acaccaaatt gtctcatatt atgaatgaac 180

actgaagggg gagtttgggg aaaaccgaat ataagcaact cattcaagga gacaaattca 240
gatgatagtt tcgagaatat aaatggagag atgtgattca caataatatt ggggatgcta 300
tcttagatgg cccgcttaag aaaaacctct caaaa 335

<210> 996
<211> 332
<212> DNA
<213> Homo sapiens

<400> 996
ctatcttaga acaagttaaa tagtatatgt acttgtaata acttgtgact agatatgtta 60
gttttgtcta ttaatttttc tgttaaaaag aatatgcatt gaaatgagat ggaaaacaaa 120
atgaaaagtg tttaaaaaat taaatatttt agaaggatca atatcctaag ggttgtgggt 180
aatttttcc tactttctaa aacttcagat tcctttcact cacttaaggt tgtactacca 240
ttaatgcaat gttttctggg agtgcgagat ttgctaatga attaataaca gctagaagcc 300
tcactatttg cacttttata acattctttg ct 332

<210> 997
<211> 334
<212> DNA
<213> Homo sapiens

<400> 997
gggactcttg ctaaaggcaa gccagggact tagacttata aagcatcacc ttatcaaagg 60
tggaggatga tcaacttgat atcaagggtg accagatttc agggaagagg gattctcact 120
aaactgactc ccagaggtct cttttagcaa ggcactcatg ccaggcgcag tggctcatgc 180
ctgtaatccc aacactttgg gaggctaagg caggtggatc gtctgaggtc tggagttcga 240
gaccggcctg gacaacatag tgaaacccag tctctactaa aaaaaaaaaa aaattggccg 300
tcacaatggc tcaggcctat aatcccagca cttt 334

<210> 998
<211> 327
<212> DNA
<213> Homo sapiens

<400> 998
atactacttt ttgtgcgtgt gtgtatgtga gacagagtct cagtctgtct cccaggctgg 60
agtatagtgg cacgatctcg gctcactgca acctctgcct tctgggttca agcaattctc 120
ctgcctcagc ctcccgtgta gctgggactg caggtgtgtg cctccatgcc cagctaaatt 180
ttttttgaag atttagagaa caccctgttt caccttggtg aggaggctga gttttaacta 240
ttacacccca ttcgcactga gtgggtttcc ctcctttaat cccgcggttt ggtgctatct 300
tttattcgag atttttttatt acacacc 327

<210> 999
<211> 331
<212> DNA
<213> Homo sapiens

<400> 999
cttctcttat atttcaactg agactatact gtaagaaaca aaaatgatct gaaccatatt 60
tgccatgtaa cattaacaat gtgagaaaat tatttttttaa aactgttgtc aattaagaca 120
taacttatat ttttctcatt ggaatttccc aacatggctg tcctggttag gacagccaaa 180
ccaagccaaa gagcagctcc ctatgtctgg gcatgcagtc atctgacttc aatagactct 240
tcacctcgac atgtcatgta ctctaagaat gtaaaagttt ttagtgctcc agcaatgcta 300
aggccaaatc cagcacaact agcatcacag t 331

<210> 1000

<211> 334
<212> DNA
<213> Homo sapiens

<400> 1000
cgtccttaaa gcttaaggcg ctcctccccc agcagcctgg cttgagggag aggcctgcct 60
ctgttgtgct cgctgtggtg ggtggtaggc accctaggtc cttaagggac atacgctcca 120
gcccttaacc tttcctcagc ctctgagttc ttccggcccc gtcctgtctc tgtggcaccc 180
gtcctgctaa taatgccttc tccattctgc ccagaacaag acaccatgcc gggtgcggtg 240
gctcacacct gtaatcccag cactttgggg ggccaaggca ggctggatca cctgaggtca 300
agagttctag accagcctgg ccaacgtggt gaaa 334

<210> 1001
<211> 329
<212> DNA
<213> Homo sapiens

<400> 1001
acgcacacac acacacgcaa acactctctc tctaacaaat gtctctgctc tatacagctg 60
gactgactcc gctctacata gctggactga ctctgctcta catagctgga ctgacattat 120
ctgctaatac acattcacct tttctgtttt tatactcatc agctcttcac acctatagaa 180
atgcagtgat gatgataaaa atgaccatta aaatatcaca gacaatatta caaattatat 240
cacaaagtta ttttcttaat aaataaagac aaattaataa gaccaatggc tcattagaaa 300
aatgaacaca ggaaatgaac aagcaattg 329

<210> 1002
<211> 329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(329)
<223> n = A,T,C or G

<400> 1002
gctgggagcg ctgttcaagg taaagagtgg ttagtaaaat gatctccttt aagttgctaa 60
gagtaagatg ccaagtaaca gaaaaatgaa actctcatgc tagcaagtgt gtatgtgtgt 120
tggcgtgtgt gtgtgtgtgt gtgtgagtgt gnnncantan aacctgtagt gaacttttt 180
attaacagga attgccgctc atggtatgct ctctccttca ccgtgaggag tttcacgata 240
ttccattctc tgcgatccgg tggaattcta ctaaaaaaat ggttcttctc ccctgggggg 300
gaatttttc tgtgaaacaa tctccccg 329

<210> 1003
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1003
ctcaacacac ccaggttttt ttgttctctc tttctctctg gcctcaattc catgccttac 60
tacttgattg ttgtatgcta ggattgaggg aatatgcatg caaatactag acaaagcact 120
tgagggaggc cttctcccac agtactggtg gctgtgtaat agatgttctc aattaccaag 180
tgcttaaact gagccctatg tacttaggca gcctgtttag agttcttacc cacttgccaa 240
tgacacttga ctgctgaatc caaatatgaa aaaaactata gatagattca aggaccaaaa 300
ttatggatat gccactgaaa atgtatggta gagta 335

<210> 1004

<211> 326
<212> DNA
<213> Homo sapiens

<400> 1004
aactttaaac aaacaaaaac ccactaatgt accaatttgt gattctgggc aaagtttttg 60
aaaagtaagt tatgaaacac cttttacctc attgtattcc ttttaataat caagcaaata 120
agtaaagtga taatgaaaaa ataatgatat gtacttaatt ttatcctttt gtatcttttt 180
ttttttttt aaaaaaaggg tctaattttg ccccccgggt ggggggggcag ggccttgggg 240
ttaacaaaac cttgaacttc taaaaaaagg gaaccttcca ttttaaccct ctgaagaggg 300
gggactttta aacccccccc cccccc 326

<210> 1005
<211> 334
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(334)
<223> n = A,T,C or G

<400> 1005
gcagtggcat gatcttggtt cactgcaacc tccacctccc tagttcaagt gctcctcagc 60
ctccagagta gctgggacta caagcaaatg ccaccatgcc cagctaattt ttgtattttt 120
tatagagaca gggttttgcc atgctaccca ggctggtctc agattcctgg gctcaagtga 180
actgtccacc tcagcctccc aaagtagact attcttatat tttcctttca ttggggagta 240
aaacaaaaat tgtttcatat gaatacattt tcacaggagg aagaaacaaa tttcattctt 300
aactgaaact tacaatggcc agaaattaag ccan 334

<210> 1006
<211> 329
<212> DNA
<213> Homo sapiens

<400> 1006
ttgatctgca gtgggacctg gaattttata cattgagcat agtgccaggc aatgcttatg 60
atcagatgat actaattaac ccctggcatc atatgatctt cactgtgatt ggagttagaa 120
gatttagctt catatcctgc cttctcctat caacacacac acatacacat atacacacac 180
acgtgcacag gcatgccaaa ttggctgtta cttatctcac ttgtattatt tatatctttt 240
tactcataaa aagactttgg gctgggtgtg gtggctcatg cctgtaatcc cagcactttg 300
ggaggctgaa gcgggtggat catgaagtc 329

<210> 1007
<211> 300
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(300)
<223> n = A,T,C or G

<400> 1007
tcttcagcag tttatataca acaaatgccc cccggttacc tcttttctgg gagagcctct 60
tgtttcaatt gaaagttctc atttacagca atctcatgag caagagtcaa gtttgataag 120
ttccttgctg tagccatcac ttcatcaaat gttacaaccc ttggagggct tgttgctgaa 180

agaaaaacaa aagccagtta atgttgcaga agaaaagttg tcatccaacg aagcctcctg 240
atgcagataa ggtttaattt atcagaatgt atatacttca gagntttata ggtcaggaga 300

<210> 1008
<211> 331
<212> DNA
<213> Homo sapiens

<400> 1008
agtaattaca ttagcaggtt tagttgtcat gaatgagttt gggaacaatc actgatgact 60
cttggtaagc ccctctgtgg gaaagaagta tctccctggg tatccaactt gcagggagtg 120
ttcaggatct catgttctgt agaggtcata aagagggcca gctaatctgg gctgtcatgt 180
agacacagct cagtggagag ttttctggca aaaggaggag caaaggccct ggggcagaga 240
aaatcttgga gagtacggaa aggccatgag actgaagtgt aataaatgag gcatgaggag 300
tgtgtgcgaa gacaggacgc aaagagagat g 331

<210> 1009
<211> 330
<212> DNA
<213> Homo sapiens

<400> 1009
gttttttctt atttgtaggt ttaagtgtct gttttccagg caccctcttc cctaacccgt 60
tacaagaatc atgtctcgtg tgatcttata tccccagtac tgagtgttcg tatggctggg 120
acttaataaa gtttaaatga actcatgaat aaatgtgttg cacaaccaat gagtgagtga 180
gtgaacaagt gagtcaataa gcaagaattt agggacatgg gaaccaccac ttataagctt 240
gaggctgttg tgcaaatttg gaccttcata taagccattt ccttctatat agaatgctct 300
ttcttttgct tacccttaac ctcttaccag 330

<210> 1010
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1010
ggtagaggcc agtgataggc taaatatcct acaaggcaca ggctgctttc cacctcctaa 60
tctctctctc tctctctctc tctctctcac acacacacac acacacacac acacacacac 120
acacacgcac gcacatccca aagaaacaaa gagagatccc atcccaaatg acaaaaggtg 180
tgagaataaa aatcctactg caaccctgta tgacaaactg ctaaggggtt tgtgcaatta 240
aaatataccc taagtgtcac agagtatact caatcaaagt ggaatatttt atttatatca 300
cccgcgctgt agagaatatt cgcacagaac tttat 335

<210> 1011
<211> 249
<212> DNA
<213> Homo sapiens

<400> 1011
cttatcaact tagtcaatgg caataatcat aaagtaaaca ttaaggaaaa tattttaatt 60
acaatactac caatattata tacaccaaat ttccttagca acagtggtta cagaagtaaa 120
caatcacgag caaaagcaaa atttacggct attgaaatca ttaacaaggg ccgagcacgg 180
tagctcatgc ctgtaatccc agcactttgg gaggctgagg caggcagatc acgaggtcaa 240
gagatcaag 249

<210> 1012
<211> 281
<212> DNA

<213> Homo sapiens

<400> 1012
ggcggagtca cccacagtgg ggcagcccct gcacaggctt tgctggagtc tccactgcac 60
tggcctaggt ccaagcagtc atagcactgc ccccagctgc ccttctaagc cctgtagcct 120
agtggattag aacctggcct ccctctggag aaaggcccag gacccgattc agcggcatca 180
ttccctagtg cttcgaccct gacctctctg agatggggtc tatgcctcgg ggatgagtgc 240
tccctgcact gggggggctgt gaccaccagc ctgtggccca g 281

<210> 1013
<211> 330
<212> DNA
<213> Homo sapiens

<400> 1013
cttctataat gcttctttta tatttcctta cagttaatgt ccattttctt tctccctctc 60
tacatgcaca cacaaacaca cccactcaca cccacaccca tgcataaata cacacacaca 120
cacgcacaca cacacacaca ccatccagcc tgtagatatt tatgcttcat tttcagtaaa 180
catgcagaag cacttttgac agacattttc ctttaaattt aaattccaaa gaactctgta 240
gaaagcagtg aatggtaact gaaaagctga gtgaaatgtt ttatattgct aaaacttttg 300
acattgatta cataatgtca gagaatcctt 330

<210> 1014
<211> 327
<212> DNA
<213> Homo sapiens

<400> 1014
gtgtgtgtgc gtgtgtgtca catgtgcgtg cacacacata tactatgttt gttgtatttt 60
tttctggtta actgagacta aacttgaaat ttaaagctgg ccttccatga aaattattta 120
atgatgcaat gcaaagacaa attgctttct acatcaattt tctatgcaag tacctataaa 180
tgttagataa ctaaattatc ccagagtttc ttcaggaaat atcagccttt tattcaagta 240
tatgattttc tataaagtat tgctattata atcttttaat gctaggtgaa tccacatcaa 300
gcattcaata tttgttggat gatacaa 327

<210> 1015
<211> 293
<212> DNA
<213> Homo sapiens

<400> 1015
cgacagaagg gtatctttat taacaattga cttgaattta aaaaaaattt tagtattttt 60
atttttaatt ttaatgaagg aaaaagtaaa catgtaaatg cttgctttat ttttcaattt 120
tataaaagca gttaattaca gagaagtgct gacatttcta cttttcatag gaaacttgga 180
gagaagtcaa aggtgtaaaa aggacaaatt ttagaaaatg agattcatga ggaaagactg 240
attaagttca ctttagttaa tgaaatgtgg aattatgaaa aattaaatat tac 293

<210> 1016
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1016
gttcctaaag tactagaggg agacacaagc caagaacctg gcacatatct cacatccccc 60
agagatttaa ttcatcagtt aaggctacac tcctatggac cccaccctcc tatgcatcaa 120
gggctggaat cactcactga aaaaaagctt tgttggctgg acacggtggc ccatgcctgt 180
aatcccagca ctttaggatg ccaaggcggg ttgaggccag gagttcaaga acagcctagc 240

caacgtggtg aaaccccatc tctattaaaa atacaaaaat tagccacaca tggtggcatg 300
catctgtggt cctaactact tcggaggc 328

<210> 1017
<211> 359
<212> DNA
<213> Homo sapiens

<400> 1017
tacggcgcga gaagaccaca gaagggtggg catatttact catcatattc aaagtcctgg 60
ggattcaggt ggaaaattaa ggccattttt aaaattctgc ttaccacatc tctggatgtg 120
tatttttcac tgcgcgttgc agtcaaaaag cttaaagagc atctagccac tggactagaa 180
aactttaagg acacttccag tcctaaaatt ctaaaaatct aacatgtaaa gctatttttt 240
taattggaaa ggaaaaacaa ttatgcaaat ttcaaagtta gttaaatcaa aaagggtgct 300
gaagatcttc ttttcctagg ttaaaataaa aaggacatgt tttaacaaaa gtgtcattt 359

<210> 1018
<211> 329
<212> DNA
<213> Homo sapiens

<400> 1018
ggatgggttt tttttaaagg gtttctcaat ccatttgtca tctaaagatg caacaagaga 60
aagatatttt cttcaatgaa aagttatctt catctttaaa tcttttaacg ctaacattaa 120
cacacaagac cctcattaaa tgctcatctc cacatgcaag gtacttgaaa aatcattttg 180
agaattagcc atatcagagt tgactgagag atataaaaaa caagaaatac aaaagacaca 240
acatgaaaaa caaaacagaa cacatcaaca tatttgtaca agacatgcct caaatgaaag 300
gtagcaaaac aattctacaa agacacaaa 329

<210> 1019
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1019
ggacctttg atcccatcat gggactgttc cccagcccta ggccactgga atgggggaa 60
agagaaccct cctttccttg ttcccactct tgtttctttt gaacatgggt tacctccctt 120
cgcgtctttt ggaacagaag gggatcataa gctcttgagt ctctgttttc tgctgtcatc 180
tactcttcct gcctctggca cctcccagct cctgacttcc tcctgcttcc ccctggagcc 240
agagacgtgg ctgggaagag cccctggcct ttgaagccag tggtggtggt gaccaggggc 300
aacaggccac tgtgctcctg gatgcgtg 328

<210> 1020
<211> 330
<212> DNA
<213> Homo sapiens

<400> 1020
tgtctcaaaa aaaaaaattt gtacatacag ggggttactg tcacataggg ctgggattta 60
ggcatgagtc acctgcctga ccagcaagtt cttaaattct gcagcaagtt cttaaaacaa 120
tggctgtagc ataaataacc cttcataaaa acgctaatca cgatgctggg acggtggctc 180
acgcctgtaa tcccagcact ttgggaggcc gaggtgggca gatcatgaga tcaggagatc 240
gagaccatcc tggctaacac ggtgaaaccc cgactctact aaaaatacaa aaaaattagc 300
cgggcatggg gggggcgcc tggtatcccc 330

<210> 1021
<211> 336

<212> DNA
<213> Homo sapiens

<400> 1021
aggcttgtga gagccactct gagctaggac ctcagctgag agaggctgga gcaacaccat 60
ggcaattttc ggattcactg cctaaactga tgtcagtggg cagatgagcc tttcacccaa 120
taagctaacg tgcgagggtc cttccaaacc ccttggcaga tggtttttta ttataggctc 180
aaagaaaaat ggggctataa ccaagttcct tgggggacag gactgtttcc atgcttgagc 240
ttggaagcaa gattgatggg acaaaacacg tacgttggtg ttggtccaca ccatcaaaac 300
aaacctccta ggtcttgagc tccattgagg tttcac 336

<210> 1022
<211> 332
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(332)
<223> n = A,T,C or G

<400> 1022
aacaaaggct tatggatttt ggtgccctct gcgattttgg cagcttttct gctgatttgg 60
agcgtaaaat gttgcagagc ccagctagaa gccaggagga gcagacaccc tgctgatgga 120
gcccaacaag aaagatgttg tgtccctcct ggtgagcgct gtcccagtgc acccgataat 180
ggcgaagaaa atgtgcctct ttcaggaaaa gtataggaaa tgagagaaga ctgtgacaac 240
tcatgacctg catccttaat atccagtgac ttcatctccc ctttcttccc acaattccag 300
gcaatggcct gtcggaccag acaattctac cn 332

<210> 1023
<211> 329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(329)
<223> n = A,T,C or G

<400> 1023
gttagccagg tgggcatgtg cataggggtg gaacccacag acaccccagc ccaggagcca 60
ttcctgatgt gggagatagt gtgtggtatc tccagtgagc cccctgaggc tcactcatcc 120
aaagggcctc agtctcgaac gacaggcacg gtcaagacaa ggcaatggca cctgtcctaa 180
aattccttac acacctctag gaaatatatc cacagataat agcttcgcct tgtagtgcat 240
gaggtccttg aatgattcct caccctcttt tggtccagnt atctttctcc ttctatgtag 300
catttcaaac actccactca cagtagtag 329

<210> 1024
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1024
taatgtgtgt gccagaattt catgacctca aggatctgaa ttttcaagtc actgcaaaaa 60
ggacgtgttt ttgggaattt tactaattcc cttaggcaga tactttgggg tgaggggggag 120
gatgttcatc ctgtctacca tctcccttct ctgaaaactg tacagctgcc ctgtaactgg 180
gtgggcccta gcaccagcca caactatact caatactttc acttattcca aactactata 240

aacatccacc tcccttagaa agaagtacta aaaataaagg caatcctact cttctgttat 300
taataaaata aaaattaaac actttggg 328

<210> 1025
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1025
cggggttcta gcagtattcg catgtcatgg aggggaaggg actaccccca gaaataatac 60
aactgcttac ccactccatg aagtgaaaga tttgaaagac atttctctgt tccaaaggcc 120
tgtgggcaga attaatagta attgccagaa aagccaggtt caaaacagac gctacacttg 180
catttattga atgagcttat tggatatctt ggttgcaagc aggaagcaac ctgctgacct 240
gagctccctg tggccctggt cctctccact ctgaaaacat ccaggcagat cttacaactc 300
ctccagtcac acccagatac caactctagg ccagacg 337

<210> 1026
<211> 331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 1026
gaaaggtctt tggacgtaaa cagtagaaaa ctacttgcat atttgaagaa aaagggactt 60
tattggaagg ctgttgggga actggcaaaa ataaggtcct cctgaagaac aaggcttgca 120
gcagacagga gtcaggcagt ttcagaggac cttgacaagt gcagcgtata ggttaggtgc 180
aggagtcaac ctgggttcac gtctttgact ctactacatg gggcaggcta tttaacagct 240
ttctgcctca gttttctgat ctgtaaaatg gtgatgatat tactcatctc agtattactg 300
tgaagtttaa atgagctggt atataaaaag n 331

<210> 1027
<211> 327
<212> DNA
<213> Homo sapiens

<400> 1027
ctgggtgaca aagtcgcaag gttgtgtctc ttacctgccc acaggtgcac gtcgtcagcc 60
ccaccgcctc actgcagccc ccaaggttac cgccagccgc cgaggggtgg gaacggcagg 120
gtgatgatat caacagccaa gaacccccctg ggcttgtcca ctgctcaggc cgtcccagcc 180
cccggggaag caggtccacc actaggccca ttcgacagat agcagcacaa tcaccgtcac 240
cacgactgga gaatgacatg tcccagcacc tagtgccagg ccctcttcca agggcttgca 300
tttgcttatc catttaaccc ccagcag 327

<210> 1028
<211> 306
<212> DNA
<213> Homo sapiens

<400> 1028
ttctgagggc cactactgtt cagtgttgag ccctcactgc cttcaagcac tggcatctgc 60
ccctctttgg ctctgtttgg tctccttggc ttcaccctga gcctcattct tggccatggc 120
caagctttcc tggtctggct cccatccagc acccagtgcc ccctgcccaa tatcgcctga 180
tgctcaagca taacccagtc acctttggtt gaatgacctt ctgagggtta gtacaacgct 240

agtttgaatt atttttcctt tcccctaatt tctttgagca gactaagtta gaaaaatatc 300
catatg 306

<210> 1029
<211> 331
<212> DNA
<213> Homo sapiens

<400> 1029
gatataaaca acattacttt ctcaaaaact ctaattcaat atataaatag tataccttca 60
cattcatgaa tcctactgtg ttcaaagact actagttttc tagttattcc tttattcata 120
tttatgtaga atatttcaga ataagcaata cttaatttta aagaatatgt ttcacaaggt 180
atttttgat ggtttaaact ttgtttatca acagaagata cctgctcaga agaaattgtg 240
ggttttcaac ctcagcgcta ctgaaatgcg tgttggattg cttttgttgg aaaaggctgt 300
cctttggatc acaggatggt tatcaaaatc g 331

<210> 1030
<211> 332
<212> DNA
<213> Homo sapiens

<400> 1030
gggttcaggg ccgggtccct ggctgagctg accccacagg tttcagcggg tgggcccacc 60
tgacggaggt cgaccccgac gaggaggtgc agggcgagat ccacctgcgg ctggaagtgt 120
ggccaggggc ccgggcctgc cggctacgct gctctgtgct ggaggccagg tgagactcag 180
gggcctgggg gcgggcagtg ggtccctgc aactagagaa acccaatgag gaagctgagc 240
ccccctcgc cccacctcta cctcctggtc ccagagctgg ccacctccca tcaaagcctg 300
ctctcaagag agggtctcgc caggcacggc gt 332

<210> 1031
<211> 350
<212> DNA
<213> Homo sapiens

<400> 1031
tacggctgcc ataatacgac agaacggacc taagccttac aagaagagat gctgtcttgg 60
tcttgctgga ggaccttgct ttacttagat gtcttattat taacgttacc tattattgat 120
ggaaatacac taatttgtat gggcctagat ggtaacatgg catttctaat attggcttcc 180
tttcttgcgg gcttgattag cttggggacc gaatcactac cgtctagctt actaacttag 240
ccaatcttgg cagaacatgt tcaccttaca cactgcacct atacgctctt gaaggcgtcg 300
caatgaacac cctcctaaat tctccatatg aactataccc taacaagtct 350

<210> 1032
<211> 321
<212> DNA
<213> Homo sapiens

<400> 1032
tgtgcctgta atcccagcta ctcaggaggc tgagacagaa ataaattgta tcagaacagt 60
gtaaacatgt agacagatac tgacaggaat aaggttttgt gataactttt tggttacctg 120
aagcatttat gaatacaggt aagtctgtgg ctatgttata gaatattgag gtctccattg 180
gtttgacttc caaattagcg ctttattaaa ctcggtgtca gtgtttgtac acctacttgg 240
gctgtatctt ttctactatg aaacatattt taactgtgaa atgaatattt taaagaatca 300
ccttggggcc aggcatggtg g 321

<210> 1033
<211> 326

<212> DNA
<213> Homo sapiens

<400> 1033
aaggggtaag gtagtgttat atgcaaacgc attaagacgg gaaataacac aaaagaaaaa 60
aatgagtcat tctaggtgga atgtaccta caaagaattg ggtaagatat aaacacggtt 120
tatctcattg gacaatgaca catcatgggc aatgttaata atctgaggct ttaataaaaa 180
tagaggataa ttggagagtt ttagacagaa gagtaaaata atcactatgt ttttttataa 240
gtacctaatt gtcatgtaaa gtatattctt ggccgggcgc ggtggctcac gcctgtaatc 300
tcggcacttt gggagaccga ggcagg 326

<210> 1034
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1034
tgagactttc ctagccatgc aggactgtga gtccattaaa cctctttact tataaattag 60
ccagtctcgg gtctctcttc atagcagtgt gagaacagac taatgcaggg gggctattat 120
gttgccaatc acaggtatat aataaaaagt taagaattat aatttctaag tggtaggatt 180
tcccttaatc cttttatcta tattttcaga agttttccca ggaatacaca tactgctttt 240
gaaatgagaa gaatgaaatc tcatttatag tctatattga cgtctttgca atgttcatta 300
atccaccttt caggacagcc ctgg 324

<210> 1035
<211> 190
<212> DNA
<213> Homo sapiens

<400> 1035
cagggaaaca gggcttgaaa gaaagaagga tgggggaaaa gaaaagagcc cagcatcaaa 60
gagaagctgg ttttgcctgg agtggccaag tctacctgac acaggcacaa tctctgatct 120
catccacatg gccaggagct ggaagtacta aaattagaat ccaaagtgtt ctaggctggg 180
cacggtggct 190

<210> 1036
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1036
attgttatcc gaaatagaga aataactcct gttaatcaag aaaaagacag aaacttcaat 60
gggaaaaaaa ggaccaatga aagagacaaa ctaccataga tcagatttct tcccatagct 120
aaacagtata caaagaaact tcatatttat aattatacaa atgcaaatca aggcagtgag 180
tcattactct tatcagaaag actctaattt aaaaggataa acacaacaat tattagaaaa 240
tgtgcatagt gttaactttc actcacttgt agtgaaaagt agtctggaaa tattttatac 300
atcatagaga aattccgaga atcata 326

<210> 1037
<211> 326
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(326)
<223> n = A,T,C or G

<400> 1037
gagctagaaa tctaggcaat gtggatttca gatgagtttc ataacactat ctgacacagc 60
gggaagttca aggaagtatc tggcaatatt atttttctta tggagccttt ccataagaaa 120
gaaattcagt tataacaagg tcacatttgg gtaggtgaca taatggtgaa atgacatttt 180
ctgccaataa caaaacctat atattgtacc tgagtggccn cnnnccnnaa naatttttt 240
tggaaaaaaa atccccccct gtggcccaag ttttaacccc aaatttccta ttccgcccaa 300
ctaagcttct taaattccag gaaaaa 326

<210> 1038
<211> 191
<212> DNA
<213> Homo sapiens

<400> 1038
aatgatactg tgataaaagg catccaccag catgaacttc atatgtgact ttgctgttag 60
atctcaggaa gatgtaaaaa ggcagtttaa gatcttttat cccaacttcc tggataataa 120
aaagatagta agtttaggac tttataaaag aaataaaatc aagaaagaaa tggggcatga 180
aaaagaataa a 191

<210> 1039
<211> 325
<212> DNA
<213> Homo sapiens

<400> 1039
gagttttcat ttgtggtgag attctctccc aggccacaag acatttcctg ctcggaacct 60
tgtttactaa ttgtaagtac tttacaagta agaacttgtt ttaaaaactt agcattcaaa 120
aaaaaagctt tctttaaaag ttatttgatt ttcttgcttt ttttcttagc atgctatatt 180
tcgagtttca gctaaatgac aaaggacggc ttatttattt gctttctttg gatgcattca 240
gtcgaaatca ttaaattctt gcttaatatt catccagacc ccaggctggt ttttgaaagg 300
tgggggggag gccaaggttt ttttg 325

<210> 1040
<211> 319
<212> DNA
<213> Homo sapiens

<400> 1040
acctatcctc attgtggtcc ccaaagctct tcctggggcc tttctttctc tttgacaaag 60
caaagctaag ggagctggga aaggtgccaa gagtgagaag tgagagaagt gatccagaag 120
tgagagctcc cagcctcgct gttgactggc ctgggacctt cagccctgcc tcttacattc 180
tcttgccctt cccaaattat taataacaca tgagtctgaa atacagtgag ctccacagag 240
gaaagacctg tattctctgg actattcaga atgttctagg gacagtgtga taggaggctg 300
agtccacact ctggagctg 319

<210> 1041
<211> 299
<212> DNA
<213> Homo sapiens

<400> 1041
gcatgaagaa agattggatg caagacaggt ctctgttgct gagatggcaa ggatccagtg 60
tgaagacctg atagtagccc taacagctga aaacagtccc tgattaacag ctagcaagac 120
aatggagacc tcaatcatat agcaacaagg aaatattttc agccaacaac cagaaggtgt 180
tcaaagcaaa tctctccctc cttaagcctc caggtaagaa tgcagcctgc caacattttg 240
ataccaactt tatgagatcc taagcacgga gtctagccat gttgtgccag tcttctgac 299

<210> 1042
<211> 320
<212> DNA
<213> Homo sapiens

<400> 1042
taagcaaatt aacatattca gattcccagg atatattttc tacataaaaa tgaaggatgt 60
atgctattgt atcctaatcg ggctaagtat ctcatgtaca gtcattttga ttttacgtat 120
atgtttggat ataggatgtc tctggaatga tatgaacaac tgacaacaat ggtagcatct 180
ggcaaaggaa actacatagt acaacaatgg gagtaagatt tccttttcaa caccatacat 240
gtttgttctt actgaacgct attcgatgtg aaaggcagta tattataacg gtcaataaaa 300
tcaagctctc caggttcaca 320

<210> 1043
<211> 319
<212> DNA
<213> Homo sapiens

<400> 1043
gacaatttta tcccttagaa cccagaacag ctgggagcag ataaaatctt cttgggttat 60
gagttcccag atgatgctgc tggcctgcgg actgtacttt gtgaacttat gctggagcag 120
atggatcaga aaccccggcc agaggatgct caggacccat caagcccccg cgaggaagga 180
ctcagacccc caaccccacc aaattaaagc aggcaatgga gaattatact gaagggattc 240
ttcggctggg caaaaacatg attagatctg cattctaaag actgctcgca gagtaaagga 300
tggattggag cagggagtt 319

<210> 1044
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1044
tacgtttgtg agaagacaac agaaggggag tctcttgccc gtccacccca agtctgactt 60
ctctcaggag ggactcatga acacgtgccc tgagcacccc caaaatgaca tcacacaagg 120
gcagaaagga gctgaagggg gaacgtgaaa ggcagaaagg gagccgtggt tgccaggcaa 180
ccagccctag cccacctttg tttgtttggt gacagcaact aaggtctggt cagggccggt 240
tggccacgct catgcctttt tctctcaaca gttgcttctt tgaagtaggg agcaggctat 300
ggtcacctgg cgggcctctt cagctaagac cttcacaaag tggggagcct tga 353

<210> 1045
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1045
cgtggcaatc tctggtttta aactggcacc tggtctagtc aggtttgttt ttagattgat 60
tactctggta gctgaatgaa ctatgatttt ggggaggata agactggaaa gagggacact 120
aattttctgg aaccttctaa aggataacca ggataattga ggtggagata caaaataggt 180
gacaaattcg agaagtatat atgaagtaaa ataggtagga tttggtgact gatagtggat 240
gtgaggcatg aagagaggga tgaggctggc aaatactaag ttgttatgat ggatgaatga 300
gaggattccc atactgtttg agatag 326

<210> 1046
<211> 272
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(272)
<223> n = A,T,C or G

<400> 1046
ggccgagaga agcagtagtc aataaagaga gtgccgtatt tcgcagattg gagctgagct 60
gtggctgcca gaagatagcg aacgaatgga aactgaaagt ggaaatcagg aaaaggtaat 120
ggaagaagaa agcactgaaa agaaaaaaga agttgaaaaa aagaaacggt cacgagttaa 180
acaggtgctt gcagatattg ctaagcaagt ggacttctgg tttggggatg caaatcttca 240
caaggataga tttcttcgag aacagataga an 272

<210> 1047
<211> 323
<212> DNA
<213> Homo sapiens

<400> 1047
gtagggggag ttttcttatg tggccctcgg actttggcaa agagcctgcg caaatgctgt 60
caccgatatt ccagtctgga tcctagaaag gttcaattct acttcaacaa agaaaatttt 120
tgagttatag gaataaggac ggtaatctgc attttgcctc tttgtatctt cagtaattta 180
cttggtctcg tcaggtttga gcagtcactt taggataaga atgtgcctct caagccttga 240
ctccctggta ttcttttttt gattgcattc aacttcgtta cttgagcttc agcaacttaa 300
gaacttctga agttcttaaa ggt 323

<210> 1048
<211> 294
<212> DNA
<213> Homo sapiens

<400> 1048
cagcccccta ttacacctga cgtggagact ttccaaaaca ccgtaggaga ttgcttcggc 60
atcgcaatgg ttgcatttgc agtggccttt tcagttgcca gcgtctattc cctcaaatac 120
gattattcac ttgatggctg tcacgagtca atagccttgg tactgggtaa catattctgt 180
gtagtattca taggatccgc tgggagtact gtcctcttca gatcagccgt tcaggagagt 240
acaggagtgt taacactagt tgctgtgcct tattggtgtc atcacagttc ttgt 294

<210> 1049
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1049
ggaagcgtcg gcgacgcatc gcgcgatgcc gcgggcggga cagtgcttgt gaaactgaac 60
acaacaaaag tatggatatg ggaaaccaac atccttctat tagtaggctt caggaaatcc 120
aaaaggaagt aaaaagtgta gaacagcaag ttatcggctt cagtggtctg tcagatgaca 180
agaattacaa gaaactggag aggattctaa caaaacagct ttttgaaata gactctgtag 240
atactgaagg aaaaggagat attcagcaag ctaggaagcg ggcagcacag gagacagaac 300
gtcttctcaa agagttggag cagaaa 326

<210> 1050
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1050

taacaaaaca gctttttgaa atagactccg tagatactga aggaaaagga gatattcagc 60
aagctaggaa gcgggcagca caggagacag aacgtcttct caaagagttg gagcagaatg 120
caaaccaccc acaccggatt gaaatacaga acatttttga ggaagcccag tccctcgtga 180
gagagaaaat tgtgccattt tataatggag gcaactgcgt aactgatgag tttgaagaag 240
gcatccaaga tatcattctg aggctgacac atgttaaaac tggaggaaaa atctccttgc 300
ggaaagcaag gtatcacact ttaaag 326

<210> 1051
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1051
acctttggtc atgcatagac taagatgttt tacttacttt ttcttttatt tgccaaaagg 60
aaatagaaaa ttcagaggcg atgttgactt ggggagacct tctgaggaag gaagaaatcc 120
caggtgacct ggttctcttc acattcctca ggaagcccgc tggtttcagg aagacctgca 180
caaaggggaa acctgacctc ataattgaac aaagctgatt tttaaacatg ggaagacagg 240
gctaatgggg tggttgtgag gagtattagt ccccttcagg gagagaattt aatgactgag 300
gtcacaggag acaatctt 318

<210> 1052
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1052
ggctgcagtg gtaatattat attcagtagc agccttagaa gagtggtcta agacttgaac 60
ctggagcaat tttatagcac agaatcctac gaagatagga ctgtgaacat ttgttttctt 120
tttcgtgtgt gtcaaactaa ctggtttttg ctttaccaat aaaatgtcct cggcagagta 180
aattttaaac gtgaaaatta tagatcttga tattgaatcc atcagtgatt caagagatac 240
acctatttgc ctaaaacaac ctaagatgta ttggttatgg aatcatgtgt tggataggtt 300
cttaagacct gtttcctg 318

<210> 1053
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1053
ctccaatcca gattttaaac acaatccttc taatgtaata tctgtaccta tatagattta 60
gtatgaaaac tatacaagct aaaaaatgag aaagcaagga aggtgaaaag aaaagatggg 120
tagccaattc ttccgggtct cagtgggaag aagaaaaaca gatggcagga agtagtatga 180
ctctcttctt ttttcactgc tggttattat ttgtaactca cagggcagaa taacagctct 240
agagctcaat ttatctggag gagattcagc acacctgctt ctctttttcc actggcatgg 300
ctcttggtgt aaatttgt 318

<210> 1054
<211> 314
<212> DNA
<213> Homo sapiens

<400> 1054
tccagaatgt gagaagagca ttttaactcc attttatgtt ctcaaatccc aagaaaataa 60
ggaatcaaga aaaatataac aagaaaaata aagaggtgtt gaaatgaaga aaccttaaaa 120
tctaaaaaga ttcctaattt ttttaatgtt gccttaaatt tttgcattga actatctcct 180
tcaagtttcc ctaatttata catgttttac ccagaaataa cagtcagcta tgcatgctaa 240
ctttaaaaag tcacgtttat cacatgttct tttcagagcc aaaagccaaa tgtcctgtct 300

cccgatgatt ccca 314

<210> 1055
<211> 316
<212> DNA
<213> Homo sapiens

<400> 1055
ttcctctaca agtcaggtcc ttgaagtgca tgagcagccc actggggcat gaacttggcc 60
ctaatgctac acataaccag tagggaggtg gtgaaaaagg gccttcagtg gggggaaatt 120
tgtggatcaa ggcaccaggg ctttcactga aaataaccct gagtcagtgg tctgcctcgt 180
ccctctgctt actatgtagc ctagccatca gcacagctga tcttagctgg tctctgattg 240
tccctcattt cttccctcaa aagctattca tgagactggg tacagtggct cacgcctgta 300
atcccagtac tttggg 316

<210> 1056
<211> 314
<212> DNA
<213> Homo sapiens

<400> 1056
cagggcctat tatagacaat ccattacagc tatgtgagga tttggaagga ttatctaaaa 60
ggcatcactg actgagaata gcttgatagc cgaaggtgat atttgactcc ttcgactacg 120
acaacatcat catactttta atatgtacag ggcatagatg tatatatatg atcatatgga 180
tactaagaga aatttggaaa aattcaacct acattactaa tataagaata tagtgacagc 240
acgtagagaa aaagagatta cgtgtttggg ggaaaaaaga caagcctaat acaaaggagg 300
tatacggctg ggcg 314

<210> 1057
<211> 260
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(260)
<223> n = A,T,C or G

<400> 1057
gtgtttaaac cacccagtct atggtacttg atgtggcagc ccaaactgac taatacaatt 60
gttaaaatct accttccaga tttcagtaga cacaaaatga accagcaaca tctcagagat 120
tgtgaccctt tgtgtgtaca aaagatgagc ccgctttttt tctaaatcag tgtggaaact 180
aaaagtaaaa gtaagttata tcctaaaatg ccaaagtttg tcgtaatcca gtaatcactg 240
ccctctaaaa tacgccattn 260

<210> 1058
<211> 313
<212> DNA
<213> Homo sapiens

<400> 1058
caaaacataa atgtattact caaaatgttt tatatagggg cacaagagtt ctttgactga 60
agcagttttt attttaagtt gtttggcctg aaaccattcc tggcagcaaa aatcttttta 120
aaagtcttca tgtgtagatt taagctatcc ttggcataaa ataattaata tatctatatt 180
tcaaagagca gatggcagaa aggactatac cgaaatatat tttatttctg agcaccagca 240
taaaaacaag agaaaaaaaa agaacagcca gaatacagag gtttttaggg ctattctaag 300
tgatactata ctg 313

<210> 1059
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1059
cttccaagta gctgggatta caggtgcttt ttatgcctgc caggccggac gcagtggctc 60
acgcctgtaa tctcatggta ataaattcta tgaataaata tagagcagag tcaggggtag 120
agagagctgg agggtaggca cctataggga aggcctctct ggcaaggcca cacatgagaa 180
atgacctgaa gcaggaggga aggagtcatg tgtatatttg agggaaaggg tgtttaggaa 240
gcgggaacag taagtgcaaa gtccctgaga tgagagagtg cttgatgtgt ttaaggaatg 300
gcaatgtgca gccaggta 318

<210> 1060
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1060
aggttgaaga cactcctaat tttcaacgtc tcccttagct tcttaataca gaatattaac 60
aagcatacaa gtataagatg ttgatcctta gaaacctagt tccaaaaggt cattattaat 120
cacaattaat tcacagaatt tatttatctt gggaatgttt ctataaaaca ttttgtgact 180
aaataggtaa agctaatggc agtatttaac tgaaaaaagt aaaggggtac attgacttta 240
ataaaaacag ttgaaagaac tattcaaaac ataaatgtat tactcacaat gttttatata 300
ggggcacaag agttctg 317

<210> 1061
<211> 319
<212> DNA
<213> Homo sapiens

<400> 1061
cgggtgcaga aaacacacat gttataaacc tatatcataa aagcaccata atgtcaagta 60
cttaaaccat aaattggata attcggtcag aaaattgcta ctgctgaaca aaatggctta 120
attttttttt ttttttttt ttccaaaaaa aatttctctt ttgttgccca ggacgactat 180
aatgggtgac aataaaggta tttgtgactt ccttgagttt tacaaccctt ttacatgctt 240
aaggcccctg acttcggcgt tttgcagcag gatacccaca ccccccggat aattctttct 300
tttaagtaaa aatggggct 319

<210> 1062
<211> 310
<212> DNA
<213> Homo sapiens

<400> 1062
ctgaggttat ccttttaatt aactctgctt tgagaagggc taactgatca gttagcagtt 60
gccttatcct tttaattaac tctgctttga gaagggctaa ctgatcagtt agcagttgaa 120
tatgacagtg tagtaatttc attactcaaa acagtaaaaa ctcaatatgt taagcataca 180
gacatacaaa tatgaagact ttttttcctt ttctattttt gttggctaat tattgggaaa 240
ttgatgaatt ttgttatagc aaaggaacgg aattggttag tatttttggt gggaagagaa 300
gagctgagcc 310

<210> 1063
<211> 156
<212> DNA
<213> Homo sapiens

<400> 1063
tagtttaggc aatattaaca ccttacatct gtaattttag cattttgaat acacagtttt 60
taatgtacat tatccattgg gcagatccat agaacaagct aaaactttcc agattcacat 120
tactttaaaa atattttgat ttgctgggtg tggtgg 156

<210> 1064
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1064
gcttctgaga agtcccacct ttctgagcag ctgtgtttga agaaagctag tgggaaaagt 60
tccaggatta catgtcagga aactacaaga ggtagaaaca tttgttgatt taccagtgtt 120
tttaacttcc tgctgggctg aaaactgctt gtttcgtgga aaagcaaaac ttgacagcaa 180
acatctaaaa tgaagagctc ccaaactttt gaggaacaaa cggaatgcat tgtgaacact 240
ctactcatgg acttcttgag cccaacattg caggttgcca gccggaacct atgctgtgta 300
gatgaagtag attcagga 318

<210> 1065
<211> 262
<212> DNA
<213> Homo sapiens

<400> 1065
gagttccaag taggtaatcc ttctgagaag tcccaccttt ctgagcagct gtgtttgaag 60
aaagctagtg ggaaaagttc caggattaca tgtcaggaaa ctacaagagg tagaaacatt 120
tgttgattta ccagtgtttt taacttcctg ctgggctgaa aactgcttgt ttcgtggaaa 180
agcaaaactt gacagcaaac atctaaaatg aagcgctccc aaacttttga ggaacaaacg 240
gaatgcattg tgaacactct ag 262

<210> 1066
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1066
gagcagaggt cagggcttca tataaacagc ctggtcccta actgcttccc ttctgcagtc 60
aaccccagga atggactttt tgttcagtgt ctcctttcat cctctttgaa gagatgcaaa 120
tttgaacaga cggtgtcgct gttgggaact gttttgtccc tgccatcaat tgtatgttcc 180
tctctgtgat tatctggtga gacagtgcaa aaatagggac aaaactaaca ggaaaaaata 240
caaggaaaca ggaaactcta gcgtacagga gttggccagc ataatttatt tttttcttat 300
gcatggtcat gctatgt 317

<210> 1067
<211> 294
<212> DNA
<213> Homo sapiens

<400> 1067
tggggaggcc tctactggga accaccttct gtaggacagt caccaggcca gatccagaag 60
gcttgaggcc ctgtggtccc catccttggg agaagtcagc tccagcacca tgaagggcat 120
cctcgatgct ggatcactgc agtgcttgtt gcagctgtag aatctctgag ctgcgtgcag 180
tgtaattcat gggaaaaatc ctgtgtcaac agcattgcct ttgaatgtcc ctcacatgcc 240
aacaccagct gtatcagctt ctcagccagc tccttttag agacaccagt catt 294

<210> 1068

<211> 317
<212> DNA
<213> Homo sapiens

<400> 1068
gtgaacaaaa caggattatt cctataaaca gataaaatta acagaagaaa acttaaagtt 60
caaaatgtat tacttgataa aatgctcgta atattatttt accataccca ttttaccatt 120
taaatattac tagtttttt tcctcaatat ccattgataa gcttattctt taaaaacaga 180
agtagggaaa gtgctagctt ttttgcttct tattcacagg aacttgtgca cctgatgtag 240
tatagcacat tctcaaacat ctaataggtc acttctgaat ttttctctga attttgaata 300
agataaaagt aatttga 317

<210> 1069
<211> 315
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(315)
<223> n = A,T,C or G

<400> 1069
caattctggt agaaaaaatc cagaatggtt ctcagtaatg gagctaaatg atttcagctc 60
tcctgttctc tatagtactc aaatagaagg aggacagtca ccatatttgc ttgttgcaat 120
tgtgcatgtg ggcataagtt tcagagatgt atgtcctgtt gccccaactt ttgcatttcc 180
tgtgtcatta taaacctttt ccaaagcata atgacacaaa acatgatcat atttatatgg 240
gtcattagca aaagggaata gctactcata ggagagatga ctgngccaag cccaacttgg 300
caacagaatg aagaa 315

<210> 1070
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1070
tgtggggtac attgtcaagc cacaaacata acctgctctg taataatacc ctcctacatt 60
gttatcttgc tttggcacag tatgattcaa gtcttaatct taacactaaa attaagtggt 120
ttcactctat taaaggcatc atcctcaact gaaactcact aaagcatata cacgtcacgt 180
ggaacagctg aacacaaagc tcttaatctg aagttgacct atttagtaaa cctatagctc 240
agaatttgac ctcatcacct cagaaaatca gggataaaat ctgtctttat attgtttcag 300
gtacttgggt atcagag 317

<210> 1071
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1071
aacactaacc cacagggagg atgaaagagg aaagtgcctc ctctggctga aactgccagg 60
atgccctcta cttctaaaaa catttggtat tttccatagc gcgtttctat aacaaaaaat 120
atgtgctagt tcccgttagc tggaactgac atgtggaagg ggccaggtct tgtggggcct 180
ggccaagact gccccctgt gtacagcaag ggaggacctg cggttccacc agagccagag 240
cagggccaga ggccgcaggg gcacctctga gctccaacaa agccagcaac accccatacc 300
gccgaacaga cagaaagg 318

<210> 1072

<211> 318
<212> DNA
<213> Homo sapiens

<400> 1072
tgccatcagc ttctgaatca tgtgtgcacc ctaccccaca cggcagtgga gtggcagctc 60
tcgtgactgt aaaagccaca caagctcaag gcaaaaagtg gaacatgcaa agggaatgaa 120
gtgaagagcc aagtcagcca cgtctctctt ccctccctca cctcccagcg gctgcctgtg 180
cccatggcac cgagtaaaga ttttaagtgg atcaagatct tcatgtttgg aacaacttgg 240
ccaatgactt tatctggtgc atctgagaaa ctattgaaag gagccacagc tggaggaaca 300
cagcacttac tagggtgg 318

<210> 1073
<211> 316
<212> DNA
<213> Homo sapiens

<400> 1073
cctactaggt caagtgagta ccaaggacag cgtggcaggt gaccatacag acgcctgaat 60
aacaggaggc atgctgcatt gaggcctacc tttggaaaaa gataccacga tgctttaaca 120
accgtggtta atagtgttca tgcctttgct aattgtactc atgaagtagt aataaaggtt 180
aatattctcc attggcatta tcaaatatca aagtactggc caggcgtggt agctcatgcc 240
tgtattgcca gcaatttggg aagctgaggc aggtggatca ctagaagtta ggagttcgag 300
accaacctgg ccaaca 316

<210> 1074
<211> 316
<212> DNA
<213> Homo sapiens

<400> 1074
ggagaagaaa gacgacagcg ggaacacaca agaagaaaac ttactcttcg tagaaaaata 60
gaagaggaat ggaagacaaa agagatgtta cttctgacaa ggatggcaga agatgttaaa 120
agagaagaga ggatagaaga acaacagcat agaaacagag aagagagtga caggaaggag 180
gtataaatat ttcaggccaa ggttcaatta tttcagcgca ggtatcaccc acgagaaatt 240
tttccagagt ttcacaggca tttttggatc cttcaaaaga agagaaggag acaaatgctg 300
attgcgatgg aagacc 316

<210> 1075
<211> 314
<212> DNA
<213> Homo sapiens

<400> 1075
tactggaact ttctaatttg taaaaaaaaa aaaatcctaa atactcttaa atcaacaatt 60
acaacccttc ataagccatt ttgggtaaat ttttgttctt ttggaaaaaa ccacactttc 120
ctgtatatgt ttcacaaaaa aaaaaagggt ctccccattt tcccagggac cgagatttaa 180
gagttgcttg ttattgcagc aaaacctcac ctcttctgac caatcatggt ggaatttctg 240
ggtgtgcgcc catgtgcctg tgtgagggcc gtgcgtgttt caccccgccg aaaccctcgc 300
ctccttaaca ctcc 314

<210> 1076
<211> 313
<212> DNA
<213> Homo sapiens

<400> 1076

actttctgct ttgccccctc cctacctcta tgctgatgaa gagccagcca tgcctccagc 60
ccttcctgag gccaccacat gatcttgctt attttcccat tccaggaggt cacctgcagg 120
gctcctccca cctagccaca atggctagtc ccgctgcctc cacagtggcc ctgcagcccc 180
atcccagacc cactgcacgg ggtcacaagc ttgtgcaggg tggacagagc agtagctcat 240
ggcagacatt ccttctgttc atctgttgca gggaaaatgg ggtgaggcat gggaggggtt 300
cccagaatcc cag 313

<210> 1077
<211> 313
<212> DNA
<213> Homo sapiens

<400> 1077
tatgggagga aaccaagcct cagagagaca gaatcatttg tgggagcagg tggagttgaa 60
tccaggtccg ccggattcca aatccgacac cacctcccac tttctgactt tgttaagatt 120
ccacccgcac tagcctgggc ccgggcaggc ctggggtcag tcccccactg cccggctgga 180
ccgcagagag cagggcacag ctcttcctac cctagttggg gccagctgcc aagatgcctc 240
ttggggttgg gaaaaggagc tgagctgctt gtccaggctg gtgggtgatt cctggggcac 300
ctgtttcagt gct 313

<210> 1078
<211> 279
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(279)
<223> n = A,T,C or G

<400> 1078
aatcactgat gactcttggt aagccccttt gtgggaaagt agtatctccc tgggtatcca 60
acttgcaggg agtgttcagg atctcatgtt ctgtagaggt cataaggagt gccagctaat 120
ctgggctgtc atgtagacac agctcagtgg agagttttct ggcaaaagga ggagcaaagg 180
ccctggggca gagaaaatct tggagagtac ggaaaggcca tgagactgaa gtgtaataaa 240
tgaagcatga ggagtgtgtg cgangacagg acgccaaga 279

<210> 1079
<211> 309
<212> DNA
<213> Homo sapiens

<400> 1079
aacacaagag tcaacactct gtaattggaa atattaatct gtgtgaagga aatagctaaa 60
ttaatgtcaa acaacaatcc cgaagacaaa gctgatgccc cagactcagt ttcagttggg 120
attaaataga tattatttca gtgtttatta aaagatgaga cacattaact aggttatcac 180
tcgtatttaa gtttctttaa ctatacgggt ctaatgtagg tactaaacaa agttaaaaat 240
attttaaaat agctaaaaaa taagcaaatt tgcatacaga aaataaattt attagacact 300
tttacattt 309

<210> 1080
<211> 306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(306)
<223> n = A,T,C or G

<400> 1080
aggggtatc ttgtagatta ggtagcaaaa ttggaagtca aagtgtccag tggcagtggt 60
gaaaagtgtt gaccaacctc ggtttgatga aggtggcgtg aaagtcaact taaacttttc 120
actgggaagc aggatatttc tgagcctaat gcttatggag aattggcctc tgtatttccc 180
tccagacttt catgaggcac ccggcttggc ccaaacatga gccagatgct gaatggcctg 240
ccaatgcctg ccaatgtgaa aattattcag tttggttaag aaacaattta ctcatattct 300
ggnttg 306

<210> 1081
<211> 303
<212> DNA
<213> Homo sapiens

<400> 1081
ctgcttcatg tttatacctc acgtgattac tcatttcaag catactgtct ctttccgaga 60
gtaatgatga aaacattgaa gaaaccatcg atccaattac ccatactgat cccagaagta 120
taaagaaaat ggtaatattc ttggatggct tcttttcata tttggtatag cttgatataa 180
agtaggaagc ctgcatgatt ttactgtgct ctcagaatag ggatttttgt tttgctttaa 240
cgcaagctgg gtgttggaag gagatttgaa acttgtgttt ggctgggata tgatgtagac 300
agg 303

<210> 1082
<211> 247
<212> DNA
<213> Homo sapiens

<400> 1082
tcttacaata atcctgtaag gtaacatata cctcttttta taaatgagga aattggggct 60
tagctaagtt aacttgcaca aggtcaccca tgtagccaag aagcgttacc tagcttacat 120
tattaactca tgccactttt atttttgag acggagtctc accctgtcgc ccaggctgga 180
gtgcaatggt gcgatctcag ctcactgcaa cctccgcctc cggggttcaa gcgattcttg 240
tgccttg 247

<210> 1083
<211> 293
<212> DNA
<213> Homo sapiens

<400> 1083
gaccagctca aaagagaaaa aggtgcaaac aatgcgaaga acacttaagg caagtatcta 60
actacatatt tggaaacaag tgaatgaaac tgtttatgta ccagagatag aaaaaatatt 120
ataacagtct acaggtgttg cattagtgtt gtgtgcttgt ctttacaact aggcagataa 180
ataaaaacaa atatgttttt aaaattccaa catgtggtag tttgaaagtg tgtctcacca 240
agtggaatca taaaatctgg ctcaaatttt agataaattt ggacttaaat ata 293

<210> 1084
<211> 298
<212> DNA
<213> Homo sapiens

<400> 1084
gagcctttcc atcagcccct gtgctgggta cgggtgaacc tggggttcct ggtttgagct 60
catggagagc cttgggccac taggggttcc ccaacgcggt ggaaagccca tgagaggaat 120
gtgagctgtg acggaggaga agtgaggcgc tattggcata aaagaaaact aatcctcgcc 180

acggggagcg ggacctgggt ctcccatgga aaaaagtgcc ttcccatcaa tccctgcgct 240
gggccccgtg gacccaggcg accctggttc taggcctggg tgcacctcag gcccgcta 298

<210> 1085
<211> 301
<212> DNA
<213> Homo sapiens

<400> 1085
tttcttcagg gaatttatca gctaccttct cccacttgaa tactatattt aaattccctg 60
tatatctgta ttggaatatg cctgacaaaa tataataacc tgagtatgtt tgcttataga 120
tattacctac aatatagtta aattgtatca ttttatgtat caatggttga aatactggcc 180
tagttcatcc actattgttt taacaaaatg ttgacacctt cctgttggtt taaatagaat 240
ctccctttc tatatctttg ctgttactat taatatgaca tgtcaagtca gatgtagaca 300
a 301

<210> 1086
<211> 326
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(326)
<223> n = A,T,C or G

<400> 1086
ggattctaca agctttttg gtggaaaaca atgataagta agccctattc atgaaaccgt 60
atgcctctca ttttgaaatg aataattgca cgtacagact tataagaata atggcactta 120
tagtgactgc tatttttaat gtctttttca aagtgctctt ctaaaacatt cttctttgac 180
atttctgatt cttttaccca gcaagnttta tgtatttttc tacttctgag gtcacctgag 240
taagaatttt ctaacagata ccacttttt ttttttttt tttggaaaag gagtctggtt 300
ttgccccaa ggttgggggg cggggg 326

<210> 1087
<211> 295
<212> DNA
<213> Homo sapiens

<400> 1087
caccettccc ccatgccaac actgccactg gcagaaaact accgagggag accagcagac 60
ctgtccccaa ctcagtggta gatgctgccc atgttaacgt gcacacagag gatgtacaca 120
agcccatgcc aaccggtgcg ctgccaacac cactggcagt gcaaatgtgt gtatgggcac 180
cactgggttc ccctaccccc atgccataca gccaccacca aagctgtgac tgcctgcaca 240
atggctggca tatctgcact caccagcacc cccctacagt tgatgagcat gcacg 295

<210> 1088
<211> 286
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(286)
<223> n = A,T,C or G

<400> 1088

gtgctaagaa aataatctct ctttttctg ttgaaaacta gcacaagtgg cctgtgaact 60
tgcttgatgg gagaaagcac atttaatctg gatgttcatc tgcaaagcat ttagtttaac 120
agccacagaa aaattattcc tgcgtaattg atccgtgaag cagatttatc gtgactagac 180
catttgtgtg tgtgtgtgtg tgtatgtgtg cgtgtgcgtg tgtgtgagtg tgtgaatgan 240
aatcaggatg acggtgtnac aacagcaccc tctggagacg atagtg 286

<210> 1089
<211> 284
<212> DNA
<213> Homo sapiens

<400> 1089
caggtaaatt gcctttgcct ctctcctggg ctagatcctg attcctgggc ctgatggctt 60
cctatttctc agttcaccct catttggtga aacatatcct caaatatctt ctttaaaaag 120
tcatggccag aaggctgggc actgtggctc acgcctgtaa tcccagcact ttgggaggcc 180
ggggcaggcg gaccacctga ggtcaggagt ttgagaccag cccgcccaac atggagaaac 240
cctgtctcta ctataaatac acaaaattta gccaggcgtg gtgg 284

<210> 1090
<211> 276
<212> DNA
<213> Homo sapiens

<400> 1090
attcattata ttatggttta cttttgcttt atactaatta ttagctcaaa aacatttatt 60
taaaaaattg aactagaatt ttaaaatata aaaaatttaa actaacaagt tagtcagttt 120
tactattagc atcaaccatt ataagtaatt cttttctata acagatcaaa atctcagtga 180
aaattcataa accacaatag ttgtctcaaa ttatttatgt tgtcaaaata acaataagac 240
tattgctacc tcaataatag gtacctcaaa acaaat 276

<210> 1091
<211> 270
<212> DNA
<213> Homo sapiens

<400> 1091
gaggcacgat aaatagtaca aaaggcatac aggtttctgc aatgtgtgta cactggagcc 60
cttataatga agacccagac acaagatggg tgcagaagct tgtctaccat atgaagatta 120
cagaaagaat ggggtcttgg atcacatggg aaaaaaaaag gttatgtgag aaaaggacgc 180
tgactagcaa cagtggactt attacgtagg cgaaacctca ctgggagcag tcctcagagt 240
gcatagagag aaaatgtttc tttcagacct 270

<210> 1092
<211> 269
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(269)
<223> n = A,T,C or G

<400> 1092
tcccaacact agcttgctat ctgagaccat ctgcctgctg ctggctttcc tggcacaaac 60
attctgcatg taggcacagt gtgctcctgg actccatgtc acctcagttc accctcatgt 120
tccctcggtt cctgtcccca gtccagcaag cagaaactga ttacagatct taacagaaga 180
tacagattga aaataacttg cctgttcccg tggactttat ccactagtca aggaggacaa 240

gtggacaagg ggagagggta ngtgggggc 269

<210> 1093
<211> 429
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(429)
<223> n = A,T,C or G

<400> 1093
cccatcgatt cgcccacctt catcctgagc ctaaaaggcc atctctgagc acttgggcag 60
ccactcctct gggcctcaga gggccatgag cttggccagg taggcacagc ggcggggaag 120
tcacagctgt caggtaccgg ccatggtgca ggtgggaata ggagatgcca gagctgcttt 180
agctgagaga aagcaaacag tcagcagtgc tcaaaggagc aaaacttcga atgtgcacat 240
tgacccctga cacctgcaag cataacacag atcctaagac tagagtgaag taggaagaag 300
aattagaaaa tccagtggat gtcctgagta tagggaacca gggccgctga aaatcagtaa 360
aggttgatta cctggngcga gaccgggtga ctgtggcagt gcaggtgaag gtaccctgga 420
ccttctcag 429

<210> 1094
<211> 426
<212> DNA
<213> Homo sapiens

<400> 1094
ggcacgaggc cacagaaaca tgcccctgat tcagtgcctc tgcttagctg taacatgtta 60
atcagaacta cctggcatct tcctgaacaa gactttcaat aggggccagt atgcttcgct 120
tcatccagaa gttttctcaa gcatcttcaa agatactgaa gtactctttc ccagtgggac 180
taagaaccag cagaacagat atactttctc tcaagatgtc tctccagcaa aacttttccc 240
catgtccaag gccttggctt tcctcatcat ttccagcgta tatgagcaag acacagtgct 300
atcatacatc cccctgcagc tttaaaaagc agcagaagca agcacttcta gccagaccct 360
caagcaccat cacttaccta actgacagcc caaagccagc attatgtgta actctggcag 420
gactaa 426

<210> 1095
<211> 427
<212> DNA
<213> Homo sapiens

<400> 1095
ggcacgagca aggaaggagt cctgggagca tggctttccc tgagccaaag ccgcggcctc 60
cagagctgcc gcagaaacgg ttgaagacgc tggactgcgg gcaggggcca gtgcgagccg 120
tacgatttaa tgtggatggc aattactgcc tgacgtgcgg cagtgacaag acgctgaagc 180
tgtggaaccc gcttcggggg acgctgctgc ggacgtacag cggccacggc tactaggtgc 240
tggatgcggc cggctccttt gacaacagta gtctctgctc cggcggcggg gaccaaggcg 300
tggttctgtg ggatgtggca tcagggcagg tcgtgcgcaa attccggggc cacgcatgga 360
aggtgaacac ggtgcagttt aatgaagagg ccacagttat cctgtccggc tctattgatt 420
ccagtat 427

<210> 1096
<211> 423
<212> DNA
<213> Homo sapiens

<400> 1096
ccccatcgat tcgaattcgg cacgaggaaa ccttaaacta tataggtctg ctggactgtg 60
tggctgagta tcatagagat tttcattgtg atctattacc tacaaagtct tcctgtggtt 120
tctctttagg ggcaagctct gtgtgattga ttggaagaca tcagagaaac caaagccttt 180
tattcaaagt acatttgaca acccactgca agttgtggca tacatgggtg ccatgaacca 240
tgataccaac tacagctttc aggttcaatg tggcttaatt gtggtggcct acaaagatgg 300
atcacctgcc cacccacatt tcatggatgc agagctctgt tcccagtact ggaccaagtg 360
gcttcttcga ctagaagaat atacggaaaa gaaaaagaac cagaatattc agaaaccaga 420
ata 423

<210> 1097
<211> 387
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(387)
<223> n = A,T,C or G

<400> 1097
ttttagttta tgcagagcga ctggtctttc ttagcatttt ttttgtangt gattggcaga 60
aaataaaaat ggccatatgt ttgaaactca gcatcatctg ccctagggaa gtaataaaca 120
aaacaagaga gcacaaagac tcaaataaag aagcaaatgg ggcacatcaa aaaaagtcta 180
ttgagaaaat ttaccccagt agctaaagat aactgatagt agagtataaa ttgaggtata 240
agaactctca gtgttcagta tgacagtggg tacacttaag actaagtgct ttttttctc 300
atttaacata atttaatact tatagaagtt tcaagaactg tacaaagaat ttcagaataa 360
tttttaccca gatttcccaa atgttat 387

<210> 1098
<211> 415
<212> DNA
<213> Homo sapiens

<400> 1098
cccatcgatt cgaattcggc acgagggtat ctattttaag tcaggggctt tactagccga 60
tttagttctc acaataacca tgtggagaag ctgtgacatt tttaatttac aacctttctg 120
gggctcagac ataaagttac ctatccaagg ttgcagttgg gtagtggtgg gaccaggatg 180
gacaactcat tggccctgcc tcaaaagcca tacctcttct cctgctatgc agaatctgtt 240
tctcctgaat ctctgtgatg ctggtgggaa ttgtttgcat agaggaagga caataaccct 300
gccatcgtga gttaatgtcc gggctggtca cagtggttca tgcctgtaat cccagcactt 360
tgggagtcca aggcaggcat atcatttgag gtcaggagtt taagaccagc ctggc 415

<210> 1099
<211> 420
<212> DNA
<213> Homo sapiens

<400> 1099
gatcccatcg attcgtggag ctaggtctcc aggtgggcct ggttcccagg cagcaggtgg 60
gaaccctggg cctggatgtg aggggcggtc aggaaggggt acaggggttc cctcatctgg 120
agttcccccc caataaagca aggtctggac ctgccttccc aggcccttct gtgggggtga 180
aggtggggaa ggcctgcggc gcccagatca ctgccttagc agtagtcttg cctgttcagt 240
gcaaggggca ggttttgggg ggaggaattc ttagcgcaag gacgggcctc agccctgtcg 300
cctccagggg gccgctgacc caggtgggga gagggcaaaa gaagggtggg ggacgtgggc 360
aggccaggct cacaggtgga aatcacggat gcagggtggt gcccacgcca aggcctgcag 420

<210> 1100
<211> 383
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

<400> 1100
gacttccggt cggcgtgagc gtgaggtgtg ggtgttcgtt tctcaagtaa aacatggcta 60
aaagcttacg gagtaagtgg aaaagaaaga tgcgtgctga aaagagaaaa aagaatgccc 120
caaaggaggc cagcaggctt aaaagtattc tcaaactaga cggtgatgtt ttaatgaaag 180
atgttcaaga gatagcaact gtggtggtac ccaaacccaa acattgccaa gagaaaatgc 240
aatgtgaggt aaaagatgaa aaagatgaca tgaaaatgga gactgatatt aagagaaaca 300
aaaagactct tctagaccag catggacagt acccaatatg gatgaaccan aggcaaagaa 360
aaaagcttga ggcaaagcga gat 383

<210> 1101
<211> 409
<212> DNA
<213> Homo sapiens

<400> 1101
ggcacgaggc ccggccatgc ttgtcctgtt gaccgaccag gaggtcctcg gggagctggt 60
gcgggcgaag ctgccggctg tgggggccct gatggagcgt ctcggtgtgc tgtggacgct 120
gctggtgtcc cgctggttca tctgcctgtt tgtggacatc ttgcccgtgg agacagtgct 180
tcggatctgg gactggttgt ttaacgaagg ctcgaagatt atcttccggg tggccctgac 240
cttaattaag cagcaccagg agttgatttt ggaagccacc agcgttcccg acatttgcga 300
taagtttaag cagataacca aagggagttt cgtgatggag tgtcacacgg ttatgcagaa 360
aatatttttc agaacctggg aggcttatcc ctggggcacc cgtcgccca 409

<210> 1102
<211> 396
<212> DNA
<213> Homo sapiens

<400> 1102
cgttgctgtc gtaaaaatta gtgatagagg tagagattta catatatata aatctcattc 60
attacttact atagaacaca gtaattttaa tatgttcctt tgaaacatat gaagaaaagc 120
agagttttca catatatgta gttagaaaag ggaaagcgct ataataacag ttagtggatt 180
tttttgttac tatatcaaac tccccacata tttcggaaat aagttgcaat gtagaatctg 240
aaagcctatg actaaacttc catactcaag tgttaaaagc tattggttta gcatgcactt 300
taagatgata ttttacccat aagtgatttt tgacatcata tattggtcat ttgaaaaata 360
ctgcttcact gtattatgta attaattgca taaatg 396

<210> 1103
<211> 395
<212> DNA
<213> Homo sapiens

<400> 1103
cgttgctgtc gacctagttg gtgcctcaca gggttcctgc tgcctggtgt cttgctgatc 60
atcaccctgg tcacttcatg ctgattagaa tgacatctct ttcgtctcct attttgttac 120
ccaactcttc ctatttttgt taccaatcac tgtgctctct gccgcccccc ggctccaggc 180
taatttttct ggaatgaatt gagaaggtcg cgtgctggcc tgagctgatg gaccacttgg 240

tgttttgcgt tttggcccat gtttgctgcc tctatctggt ctgccttgcc cgtttgcctg 300
ttcctattca gtgtcttttc tatttttcc tctctcgttc atgccttctg ttttgctctt 360
gtccctggag catatctgcc taattaagat gttgg 395

<210> 1104
<211> 396
<212> DNA
<213> Homo sapiens

<400> 1104
cgttgctgtc gggaaagtaa ccaagaaacc tctaggaatt agtgaaaaaa gaacttttt 60
gaggtgtgtt actatactgc tgtaagttat ttattatata aagtattgta aatagaatag 120
tgttgaagat atgaaatatg gctatttta atggtgacaa ttatgacttt tagtcactat 180
taaattgggg ttacctatat cagtacaatt tgtagttgtt tccaggtttg gctaataatc 240
attccttaac ctagaattca gatgatcctg gaattaaggc aggtcagagg actgtaatga 300
tagaattaaa ttagtgtcac taaaaactgt cccaaagtgc tgcttcctaa taggaattca 360
ttaacctaaa acaagatgtt actattatat cgatag 396

<210> 1105
<211> 380
<212> DNA
<213> Homo sapiens

<400> 1105
tactccacaa atagagatgt atctactccg atcgggggaa ctgtaggaga gaatatgtga 60
aagccacttc ctacgcccaa tacgaatgag ttgtctttaa acatctgcca ggcccaggca 120
gctctccatg caagtgcaag ttcacaaaca agttttctac tcctgtccta ttccgccttc 180
ctttgatcct actctggaag agttagaaac tggcaaactt ggggtgcaag cataaaaatt 240
aggtgtctca tctccttccc cactgtggac ttctagccta cagaagttcc tagctgaatg 300
aaagacctag attttgtact atctcatgtt tgggatttgg attgagacca caccatagaa 360
gagaatcatg agcctagagc 380

<210> 1106
<211> 289
<212> DNA
<213> Homo sapiens

<400> 1106
acttgagccc aggaggttga ggctgcagtg agctgtgatt atgacactgc actccagcct 60
gggcaacaga gcaagaccct gtctcctcct tccccgtccc ctccaaaaaa aaaaaaaaaa 120
aaaaaaaaaa agggggggag ttttttcggg gaaccccacg gggaaaaaac ctttgggggg 180
gtggggcccc ccccccctta aagggggggg aaaaaaggtt ttttttggga aaattggggg 240
cgcttttgtt tttttggccc ctttaaagcg gggaaaaaac gagtaacag 289

<210> 1107
<211> 393
<212> DNA
<213> Homo sapiens

<400> 1107
cgttgctgtc gaggaactcg gccgcccgga gttgtggcct catcgtgctt cccgccaaaa 60
acgccttggt actgtcggga cgcggctaag cgtggacgcg cccgcatctg cccctcctcc 120
gcagtggtgg aagacacccg cggagcgccg gtggataagg gccgtttcct gagaccagag 180
ctgtatccgc agcagcctac ccgtatatta caagaaatct caagtcaaac actggaaaag 240
atgtcagaag attcagaaaa ggaagactat tcagacagaa caatcagtga tgaagatgaa 300
tcggatgagg atatgttcat gaaatttgta agtgaagatc ttcatcggtg tgcactttta 360
acagctgact cttttggcga tcccttattc ccc 393

<210> 1108
<211> 397
<212> DNA
<213> Homo sapiens

<400> 1108
cgttgctgtc gatattctga aagatgtcag tggagtgcga gctcttgaaa gtgctgttca 60
acatgaaacc ttaaactata taggtctgct ggactgtgtg gctgagtatc agggcaagct 120
ctgtgtgatt gattggaaga catcagagaa accaaagcct tttattcaaa gtacatttga 180
caacccactg caagttgtgg catacatggg tgccatgaac catgatacca actacagctt 240
tcaggttcaa tgtggcttaa ttgtggtggc ctacaaagat ggatcacctg cccacccaca 300
tttcatggat gcagagctct gttcccagta ctggaccaag tggcttcttc gactagaaga 360
atatacggaa aagaaaaaga accagaatat tcagaaa 397

<210> 1109
<211> 393
<212> DNA
<213> Homo sapiens

<400> 1109
cgttgctgtc gaaaaaggag agctcttctt caagataagg aagtggtagt tatggtggta 60
acccccggct atcagtccgg atggttgcca cccctcctgc tgtaggatgg aagcagccat 120
ggagtgggag ggaggcgcaa taagacaccc ctccacagag cttggcatca tgggaagctg 180
gttctacctc ttcctggctc ctttgtttaa aggcctggct gggagccttc cttttgggtg 240
tctttctctt ctccaaccaa cagaaaagac tgctcttcaa aggtggaggg tcttcatgaa 300
acacagctgc caggagccca ggcacagggc tgggggcctg gaaaaaggag ggcacacagg 360
aggagggagg agctggtagg gagatgctgg ctt 393

<210> 1110
<211> 403
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(403)
<223> n = A,T,C or G

<400> 1110
cctcgggcta ccaggtttta gcagcaactt acaaccaggc tgcccagctc tggaaggtgg 60
gggaggcaca gtccaaggag acactgtctg gacacaagga taaggtgaca gctgccaaat 120
tcaagctaac gaggcaccag gcagtgactg ggagccgcga ccggacagtg aaggagtggg 180
acctcggccg tgcctattgc tccaggacca tcaatgtcct ttcctactgt aatgacgtgg 240
tgtgtgggga ccatatcatc attagtggcc acaatgacca gaagatccgg ttctgggaca 300
gcaggggccc ccactgcacc caggtcatcc ctgtgcaggg ccgggtcacc tccctgagcc 360
tcagccacga ccaactgcac ctgctcagct gttcccgaga can 403

<210> 1111
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1111
gggagtcgga gggggcagct agccgagatg acgaggcacc actccagcct ggcgacagag 60
tgagattttg tcctaaaaaa agaaagaaag aaaatgaaaa catttcatct ggaatatcca 120
aaattaggtt taatatattt taaatctcat tagacttttt gatagattgc tgtaaatatt 180

atgtgaaagt tatgcttgtc ttcaatttca gtggtgttag atatctaaat acaagcctgg 240
ctatttttgg ttttttttt ttttaaaaa aaactttggt cttcaacccg gccggagggg 300
gggggaaca atttgggtaa aaggaacatt ggcctccaaa acccccccct ttccccggcg 360

<210> 1112
<211> 382
<212> DNA
<213> Homo sapiens

<400> 1112
cgctgctgtc gttaagtttc atggttaagc tgttttcagc aggcccacga gtatcaagaa 60
caaaagggac ggtcctccag taaagatggc catcaaggca gcaaatctaa tgactccggg 120
gaagaagcat aaaaagagtt tatttttgtg taaaggtcac ccacgcataa ttcttcctgt 180
gcccctagct tggcaagccc ctttactgga accctggtcc tgatatatgt ttaccaggcg 240
gacgtctgtg cgtgctttat tctcttcttt ttctttatat agcccccacc cccatcccct 300
gccttttttt ttttttttgg aaaaaaacac caccttttt tggaaaacaa aacaacattt 360
ttggggcttt ccccccccct tg 382

<210> 1113
<211> 360
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(360)
<223> n = A,T,C or G

<400> 1113
ggcggctggc gcggcggacg ggatgaggcg ctgcagtctc tgcgctttcg acgccgcccg 60
ggggcccagg cggctgatgc gtgtgggcct cgcgctgatc ttggtgggcc acgtgaacct 120
gctgctgggg gccgtgctgc atggcaccgt cctgcggcac gtggccaatc cccgcggcgc 180
tgtcacgccg gagtacaccg tagccaatgt catctctgtc ggctcggggc tgctgagcgt 240
ttccgtggga cttgtggccc tcctggcgtc caggaacctt cttcgccctc cactgcactg 300
ggtcctgctg gcactagctc tggtgaacct gctcttgtcc gntgcctggc tcctggggct 360

<210> 1114
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1114
ttatttgggt cttgtgggaa gaataattat tgctattggt tttgttagta tcccaaagaa 60
aagttattat ttttaatata cgcacctaga tctctgtctc tctctacaca cacacacaca 120
cacacacaca cacacatatt tacatataga tataaatctg gaatgtatct ttttatacat 180
acatttgaaa tataaatcaa tatctctgta tatatccatt tatacttata tatatggtca 240
tattggtatt atttatagat ttaagaaaac tactttgtta aatagattgg caagattctt 300
tgagtacgat gaaacttcaa attgcctata aagtaag 337

<210> 1115
<211> 329
<212> DNA
<213> Homo sapiens

<400> 1115
ataagattgg atgactgctt gaaagttata tgaaactgtg taattcagct tgcagaaatt 60
aagttccctg cttcatgttt atacctcacg tgattactca tttcaagcat actgtctctt 120

tccgagagta atgatgaaaa cattgaagaa accatcgatc caattaccca tactgatccc 180
agaagtataa agaaaatgtt aatattcttg tatgtcttct tttcatattt gggatagctt 240
gatataaagt gggaagtctg tatgatttta ctgtgctctc agaataggga attttgtttt 300
gttttaatgg cagctggcgt tggaaagag 329

<210> 1116
<211> 330
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(330)
<223> n = A,T,C or G

<400> 1116
ggcaagatgc tttctacagt agacagttcc ataagagggc agacagttga gggctattta 60
ccaaaagcca gtcctcccag ctattgggag ataagtccca attcttgaag acagggtggc 120
atatcactag tacagtaata tagataaaag ttttttaatg atagtttagc aaacgtgaag 180
tttttaattt atttaaattt tatttattaa attgcctgtg aatgtgacac tttcttcatg 240
catgttttat caggtaagtg cttctttctc ccttgaaaat tgtaattctg cagagaggga 300
gctactgtaa atttaagctt tttgtttgtn 330

<210> 1117
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1117
aaatgatacc tttaaaaaag cctcttccta aagacttctt ttaagtaaaa tgatgatcac 60
taattacttt gttgtgagca caaataagaa ttacttttctt caaaaattct aactaaataa 120
attactccag tcaaaaagat gtactcaatt aattctttat taagggcgtt gtaaaatcta 180
agtgattgtt ccagagaagt taggcagtgc caggaaaata tttatcactt agcttagtaa 240
ttatttactt agaaaaagtt caaaaaaggc cgggcgcagt ggctcacacc tgtaatccca 300
gcactttggg agaccaaggt gg 322

<210> 1118
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1118
aaatgatacc tttaaaaaag cctcttccta aagacttctt ttaagtaaaa tgatgatcac 60
taattacttt gttgtgagca caaataagaa ttacttttctt caaaaattct aactaaataa 120
attactccag tcaaaaagat gtactcaatt aattctttat taagggcgtt gtaaaatcta 180
agtgattgtt ccagagaagt taggcagtgc caggaaaata tttatcactt agcttagtaa 240
ttatttactt agaaaaagtt caaaaaaggc cgggcgcagt ggctcacacc tgtaatccca 300
gcactttggg agaccaaggt gggc 324

<210> 1119
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1119
gtgacaataa tgtattttat aacattaacc atttttagat tctttgaata aactcaattt 60
ggcaaaggtg cgggtggttt tttttttta aaatagggct tgttaaactt acttttggg 120

gaattttgca tttataaccg ggccttcatc atttttaact ggaaaattct attctaagtt 180
ataaaactta aggcaagtta ctcaaataat acattaatac ttgcccacga atctttaaaa 240
gaatccagaa aaaaggaaac tccctttttt cttcaatact acctatcctc tgccccaacc 300
ttttctattc attctttt 318

<210> 1120
<211> 187
<212> DNA
<213> Homo sapiens

<400> 1120
acacttttaa atatgtaatg cttccaatct tgctttgtgt atctcattta atttgttata 60
aggtagtact gattttagca tattaatgcg acttcttcct tgttgtttgc tttggtctgt 120
ggtcatccag agagcttaaa ttgtcattat tttgggaaga aaacctgtat ttttgttagt 180
ttacaat 187

<210> 1121
<211> 319
<212> DNA
<213> Homo sapiens

<400> 1121
aactagatgg agtcctggca ctcactggga ttgagaacac atgacaaact aataggttta 60
ctgggcaggc ggctaagctg atctacttgc tggttcaatt agctccactt tccggaggct 120
agcattttcc caaccttgcc ccatgctctt gtgggtacat ttaccctatt tggggcctta 180
gcgctttaca aatgaacgtt tcagtttaag agacattgcc gcataactta tattaagtgg 240
tatgaattca aaagcaagct ctgccactac acatcagaat ccagcactga aggaggtgtg 300
gaagtcataa agatggaca 319

<210> 1122
<211> 174
<212> DNA
<213> Homo sapiens

<400> 1122
gtagatacta tgtgttgaag tctatagcta agcaacttaa gccaaaaagg tctttcaact 60
gaagctttaa tcaacttatt ttggagatgt tctctttcct ttactcatgc gtgattccta 120
aaataataag atacatggga ttaaatagcc cttggctttt aacacaaatc aggt 174

<210> 1123
<211> 177
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(177)
<223> n = A,T,C or G

<400> 1123
anaaacaaaa gccacatcct gtttttttata ctgtcttttt gtggcttgct catggcatga 60
attttctagc tgtcaacaaa gggaggggcg cttttgggct ggaggagaca agaagccttc 120
aggaaaaagg agggctttg atacattttc tttctttcct tcctttcttt ccttcct 177

<210> 1124
<211> 392
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(392)
<223> n = A,T,C or G

<400> 1124
acagttaaga aaatattaca gaatgtagaa caaagaaaca aacagaaaac aaattagtga 60
aaaaaaatta cacacacata cacacacgca cacacttatc tatctctcta tatatatcta 120
gttcagtact tgcaatatag gcatcctaga gagaaacaat ggacaaagta gaaggaaaaa 180
tgatcaagga actaataaag gagatgttcc cagactaaat gcagtcataa gtctgcagtt 240
ggagtttgct tactaagtgt ccagcacatt aaataataaa aggctcacaa cctaaacaga 300
tttttgagaa atttgaacat ccaaatgaaa aaaaatagaa aatcctaagt ctttcagaga 360
caataagtaa ctacaaagga agaanaatat ga 392

<210> 1125
<211> 415
<212> DNA
<213> Homo sapiens

<400> 1125
cgttgctgtc ggtgaaagag aaatgttttt cttgttgcat tgattacatt ttataaattt 60
gcttagctgg aaagtttggg aaaagaggcc tgtttgtcaa ttgtacaacc gattgtgaag 120
ctctagtgtg aatattttta cgtctgtatt agacattttc tttgcaaatc tattgttcga 180
ttgaaatgta aatgaaatta aagatggtgt acacccatca tgtaaaaagc aggcaccatc 240
tctaagatgg atttaatgct cattttaag gcatatactc agcttctatt taaaactata 300
atttaaaata attctgtaca atgaaatggg gaatatatat gggaataaat tctattccat 360
ttatttcaat ttgaatttcc aaattgtaat gtttcccttt gtgctatagg aatag 415

<210> 1126
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1126
agaggaggag aatcgggagc agaagaagga ggaagagatg aagagaacaa caaaagaatg 60
aggaaaagag aagaggacga caggaggagg agaggatgag aaaaagagga aaggaggaaa 120
ggaagagaag gaggaggagg agaaggagga gtacaggaga tggacaagga ggaggagggg 180
accaggaaga ggagaagacg acgagaaagg agaggaggag aatcggcagc agaagaagga 240
ggacgagatg aagaggtgaa tgagaggagg aggaacggag aacataacga ggaggataac 300
aggagtggac atgactgcat gctgcattca ctcggacacg ccgccccttа tttcaggacg 360
aacccgtggc ctatgtgata ccgccc 386

<210> 1127
<211> 423
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(423)
<223> n = A,T,C or G

<400> 1127
aggcagctga tacactaggc atagagtgtt tgcagcacag agaaaagtgc agcagcacct 60
cactcgatcc tgctggcatt ggctttcagc tgcttcttaa ctttgggtga aacggcagct 120

gccaaccagt cacactggct ttttgtgaga ccactaccat tcccgagata cttctgatta 180
gccatgcact ctgccatagc ctcaggaggt tggaactttc agtacctgga agaagagttt 240
ttacccaaag aacagcttct tcctttatga tctggccagt tgtcagtgga ggaaggtgtt 300
tgtcccctca ggtggctgaa aggtaactac ataattgata agagtattag gaataactat 360
agtcttgccc ttcaaactga tcttgaacca actgtgtaca tactttgggg cactaaggaa 420
aan 423

<210> 1128
<211> 413
<212> DNA
<213> Homo sapiens

<400> 1128
cccatcgatt cgaattccgt tgctgtcggg ggaagactcg gagtgcgatg gcggcgcaaa 60
ttccaattgt ggccaccact tccactcccg gaatagtccg gaacagcaag aagaggccgg 120
ccagcccttc ccacaatggc agcagcggcg ggggctatgg cgccagtaag aagaaaaaag 180
cgtccgcttc cagctttgcg cagggtatca gcatggaagc catgagtgag aataaaatgg 240
tgccctctga gtttagcaca ggacctgtgg aaaaagctgc caaacctttg ccatttaagg 300
atcccaactt tgtgcactct ggccacggtg gcgcagtagc tggcaagaag aacagaacct 360
ggaagaacct gaaacaaatc ctcgcttctg aaagggcatt ggccgtggca acc 413

<210> 1129
<211> 333
<212> DNA
<213> Homo sapiens

<400> 1129
aaccccactg taggagcact cttgaagaaa atctgcctta ccatctttaa caagagttta 60
aaaatacttt tttctttaaa agttacttac tgatccagcc ctttataaga agaaaaaccc 120
ttagtcccca ttttctaaca gtgaatttat tagttttctt taaagaaaac aataataaaa 180
gacccagtca aaatctattt tattcatcaa gaatcttctc ctattgagtt gcttcattcc 240
attaagctta aatcagccta gactgaaaga acctcagata cttaagggtg gttcattatg 300
ttctatagat attctactta tttataatga ggc 333

<210> 1130
<211> 418
<212> DNA
<213> Homo sapiens

<400> 1130
cgttgctgtc ggtgactctc tcttctagag aagaggtttt caataacagg gcttggaaat 60
gaacgtagaa ggggaaatag atcttttcag atgctgcttt cccatgtaat acaagcgttt 120
ctacagggta ccagaggtgt gaaatatgtg acacttaaga acagtgattt ttattgggaa 180
ttttcttagg gttattacac ttaaagcaac aaccaactag taacagctcc aggaaagggg 240
aatgaatcaa ctcttggttc tttcctgaag acggcagtgt tgtggataag tgagttttta 300
atgccctggc agtggctaca tttgacactt tagaaaaaat aaacatattt aataattttt 360
gtttctcctt aggaataaga ctgtagaact gttttgtact gtgaattacg gatgctct 418

<210> 1131
<211> 389
<212> DNA
<213> Homo sapiens

<400> 1131
caaatggttc ttatttagga aacacacaca ttattacctt agaaaatatt tcattatatt 60
tgcaagctac ataaaatagt tcttgtatgt gtataattta ttttatccta tcattctaga 120
aaggatttta attgggtctt atttttaatg tatgtctatg taatttccct acttataaaa 180

taaacttgtt tattatagga tagtattaac tgaacaaaag gctgtataat tttctgtaca 240
catatgaata ttttctaact cattttcatt catctcaact ttagaatgtc tcatttttct 300
tgactaaaaa actctcagag ccaacagtta tgccctccaa aggaagcaat gcaggtgata 360
ataagtgaaa aaatgctgat acagaccct 389

<210> 1132
<211> 422
<212> DNA
<213> Homo sapiens

<400> 1132
cgttgctgtc gggcaactaa acctgtcctc ttgaattact tcttcactgc gctttctgag 60
gaaatgctga ttggttactg ctaaagattc cactaacaat tcaaattggg gatctttgtt 120
cccatggcat gaaaatgccc atgcccgcat gcaaaaatgc tgaaggtctg aaagacagat 180
tgttttgtgg aaagtaaaga gctctggtct ggaagaaact gtttccctaa agcgtgttcg 240
ggtgtgattt gtgtgggggg ctgaaagcta ctgcatgaat cataacggct cattgaaatg 300
tatggacctt ggtttaaatc cagggacccg gctcccaaac acactcttga aatgctgttg 360
aaaactgttt tataaagcta agaattgcac ttcttgaggt ataaaaacca aacggaagtt 420
gg 422

<210> 1133
<211> 415
<212> DNA
<213> Homo sapiens

<400> 1133
ggcacgaggc tgcagccgct ggcccgaaaa tgctgctcgg gcgagcaggg gtcaggcggg 60
aaaagaagac tccaaatcca ttctctgctc gcccccaggg caatgctgcc aggagaggga 120
gtgggttccc ccgcaggcta tcccaccgat ggggctgaga gcttaatttg gggttttatt 180
tgaattggag acattgttcc ctcttcgctc ctctacccca taaaattccc tacaaatgca 240
aaaattcgag atagaagaag ccgtccctga aagtaagttc tgaaggattc ctttcatgcg 300
gtgaaggaac aacaacaata ttcaacttca ccttggtgtg tgagggtcgt cgtgttttaa 360
aacactatcc ctgtagaaag attagtgaaa tgtattggaa gaagtagtgg aaacg 415

<210> 1134
<211> 391
<212> DNA
<213> Homo sapiens

<400> 1134
ttgtctgtgg gaatttcaac agaaggtaat acacaggcaa actacacttg aaggcaacat 60
ttctctctgg ctttcctttt ctacacagag agatattcta actgatttgc aagggtgctt 120
ctcagttggc cggaatgaga tattttcaga tgaaagccta tgactctgtg tcacttcccc 180
ccttattttt gaatctcatg tcttagttct gcaggcactg ttatttttaa ttattattat 240
tatgcctgtt gccaagctat tccactttac acagagttga ttagagacct gacaaatcca 300
ggccaacata aagtcctggc ttccagatca gactacgtga acaaagaaaa aaaagaaatc 360
taccaaagtg ccagctttta gaaagctctt a 391

<210> 1135
<211> 391
<212> DNA
<213> Homo sapiens

<400> 1135
ttgctctggg gctttccatt ttaaacctga cctttctggc tctgggtttt tccattttaa 60
acctgacctt tctggttcca ggtgaaggca gagacagata aaataggatt attgtatgtc 120
agtatgtttt caactatttc tcctgaaact tggaaacgta ttagaccatg tgggatacca 180

cgcggacggg aacgggggat aaatgtgtgt tcatatatac tcctccacaa atatacatgt 240
ctcaggctgg gcgcagtggc tcacgcctgt aattccagca ctttgggagg ccaaggcggg 300
cagatcactt gaggtcagga gtttgtgacc agcctggcca acatggtgaa accctatctt 360
tactaaaaat acaaaaatga gccgggcgtg g 391

<210> 1136
<211> 432
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(432)
<223> n = A,T,C or G

<400> 1136
ttcttttgcg gatccctcga ttcaattccg tgctgtcgct ttcattcct gattctttgt 60
atgtgacttg tttttctcct cctttgcctt tctctttgga ggcctgtagg attttctttt 120
tgtccctggg gttctataat ttcacagtga tgttgtgggg tggaaatctt tctcattttt 180
tgagctgtgt ctttgcttat ctttttttca tttgggtaac aatctatatg ttttgttggg 240
agatcaaaca aatatcagta tctgcatgtt ttatctcttg ggccaattgg ttttcttaga 300
gaagaacctc ataatctgct cagggagtta gtttaagacc agcatcattg tgggagccca 360
gtggtggaag caggaatgat gtcctcacca tttggtgtac aggttctcac ataatgcctc 420
tgttctcagt cn 432

<210> 1137
<211> 387
<212> DNA
<213> Homo sapiens

<400> 1137
gtgatcaaaa gaaatcccca gtaattctga aggccgcgta aacagcgaac gaaaggagag 60
agggaaaatg atcccggccg cctggaagcg agaggcagcc acagacacac tgttccggaa 120
accgcaggat gtaactgggg agtcctggag agtgactaga accggaaagg gggcagacgc 180
tttgagggag gcaggcgggg gaacaaacgg gttgcagcca gcaggctggg ccgaggttcc 240
gggggacatt tgtcctgggt gttgaagcaa gctggctcct ggccgcttac ctagtatcct 300
gtgaactctc acatggcatc gtcaggaacg aagcgcagcc attcagtcaa agcggccggc 360
tggagaggca acaagcaggt gcagctg 387

<210> 1138
<211> 421
<212> DNA
<213> Homo sapiens

<400> 1138
cgttgctgtc gcagagacag ctccgtccct agtggagcgc aggggaggca gaagtcatga 60
caggcgaggt gggttctgag gttcacctag aaatcaatga cccaaacgtc atttcacaag 120
aggaagcaga tagtccttca gatagtggac agggcagcta tgaaacaatt ggacccttga 180
gtgaaggaga ttcagatgaa gagatatttg taagtaagaa gttgaaaaac aggaaggttc 240
tacaagacag tgattccgaa acagaggaca caaatgcctc tccagagaaa actacctatg 300
acagtgccga ggaggaaaat aaagagaatt tatatgctgg gaaaaataca aaaatcaaaa 360
ggatttacaa aactgtggca gacagtgatg aaagttacat ggaaaagtct ttgtatcacg 420
a 421

<210> 1139
<211> 422
<212> DNA

<213> Homo sapiens

<400> 1139
cgttgctgtc gggagacggc gggagccgct gctctccggc tgagggaatc agagacagct 60
ccgtccctag tggagcgcag gggaggcaga agtcatgaca ggcgaggtgg gttctgaggt 120
tcacctagaa atcaatgacc caaacgtcat ttcacaagag gaagcagata gtccttcaga 180
tagtggacag ggcagctatg aaacaattgg acccttgagt gaaggagatt cagatgaaga 240
gatatttgta agtaagaagt tgaaaaacag gaaggttcta caagacagtg attccgaaac 300
agaggacaca aatgcctctc cagagaaaac tacctatgac agtgccgagg aggaaaataa 360
agagaattta tatgctggga aaaatacaaa aatcaaaagg atttacaaaa ctgtggcaga 420
ca 422

<210> 1140
<211> 419
<212> DNA
<213> Homo sapiens

<400> 1140
cgttggtggc ggctgcggcc ggtttggccc ttctttgtag gagagtttca tccgccctga 60
aatggtgccg agcgttaata actcctcagg tccctgcctg cacagggttt tttcttaatt 120
tgttgcctaa gagtacacca aatgtgacat cctttcacca atatagatta cttcatacca 180
cattgtcaag gaaaggacta gaagaatttt ttgatgaccc aaaaaactgg gggcaagaaa 240
aagtaaaatc tggagcagca tggacctgtc agcaactaag gaacaaaagt aatgaagatt 300
tacacaaact ttggtatgtc ttactgaaag aaagaaacat gcttctaacc ctagagcagg 360
aggccaagcg gcagagattg ccaatgccaa gtccagagcg gttagataag gtagtagag 419

<210> 1141
<211> 417
<212> DNA
<213> Homo sapiens

<400> 1141
cgttgctgtc ggccggtttg gcccttcttt gtaggagagt ttcatccgcc ctgaaatctt 60
cccgagcggg gtaactcctc aggtccctgc ctgcacaggg ttttttttctt agtttgttgc 120
ctaagagtac accaaatgtg acatcctttc accaatatag attacttcat accacattgt 180
caaggaaagg actagaagaa ttttttgatg acccaaaaaa ctgggggcaa gaaaaagtaa 240
aatctggagc agcatggacc tgtcagcaac taaggaacaa aagtaatgaa gatttacaca 300
aactttggta tgtcttactg aaagaaagaa acatgcttct aaccctagag caggaggcca 360
agcggcagag attgccaatg ccaagtccag agcggttaga taaggtagta gattcca 417

<210> 1142
<211> 429
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(429)
<223> n = A,T,C or G

<400> 1142
atatccctca ttcgaaggtg gnnggggtnc anaacaaccc ctttcatgtt ggaaaggaag 60
ctcatcaaac gagctctggg aaaggggnca ttattcacag agagaaacga cagcatcgta 120
aacgtgataa ggtgctgact gattctggtt cattggattc aactatccct gggatacaaa 180
ataccatcac agttaccacc gagcaactta caaccgcatc atttcctgtt ggttccaaga 240
aaaataaagg tgattctcat ctaaatgttc aagttagcaa ctttaaatct ggaaaaggag 300
attctacact tcaggtttct tcaggattga atgaaaacct cactgtcaat ggaggaggct 360

ggaatgaaaa gtctgtaaaa ctctcctcac agatcagtgc aggtgaggag aagtggaact 420
ccgtttcan 429

<210> 1143
<211> 435
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(435)
<223> n = A,T,C or G

<400> 1143
tcgattcgaa ttccgttgct gtcggcagct gcctgaggac ccagggcaag gcagcagctc 60
cgtggagttt gacatggtca agctggtgga ctccatgggc tgggagctgg cctctgtgcg 120
gcgggctctc tgccagctgc agtgggacca cgagcccagg acaggtgtgc ggcgtgggac 180
aggggtgctt gtggagttca gtgagctggc cttccacctt cgcagcccgg gggacctgac 240
cgctgaggag aaggaccaga tatgtgactt cctctatggc cgtgtgcagg cccgggagcg 300
ccaggccctg gcccgtctgc gcagaacctt ccaggccttt cacagcgtag ccttccccag 360
ctgcgggccc tgcctggagc ancaggatga ggagcgcagc accaggctca aggacctgct 420
cgggcggtac tttgg 435

<210> 1144
<211> 425
<212> DNA
<213> Homo sapiens

<400> 1144
cgattcgaat tccgttgctg tcggcagtgc aaaacagttc acgccatgat ggaaaggaag 60
ttgatgaagg agcctgggaa actaaaatta gtcacagaga gaaacgacag cagcgtaaac 120
gtgataaggt gctgactgat tctggttcat tggattcaac tatccctggg atagaaaata 180
ccatcacagt taccaccgag caacttacaa ccgcatcatt tcctgttggt tccaagaaga 240
ataaaggtga ttctcatcta aatgttcaag ttagcaactt taaatctgga aaaggagatt 300
ctacacttca ggtttcttca ggattgaatg aaaacctcac tgtcaatgga ggaggctgga 360
atgaaaagtc tgtaaaactc tcctcacaga tcagtgcagg tgaggagaag tggaactccg 420
tttca 425

<210> 1145
<211> 397
<212> DNA
<213> Homo sapiens

<400> 1145
cgttgctgtc ggttcaggtc actgattgtt tggaaagcct gataaactgc cacggccacg 60
aggagtctaa ggacacatcc aatttccatt cgcatccaaa atggaatccg agacagaaag 120
aggaccttag ccttcatatc tgtttttttc ttatgaagct tctttctgggt ggaaacttgt 180
caaatttcat caggtaagaa gtgctaaagt gaacctgtaa actttgtttc aaaaaacaaa 240
aaccgaagtt taagaaatct aaagatggtg tcagccttag acagatctct ggactgtaat 300
ctgggaaagg tcaaataaga tctccaatcg tgtacaattc caaatacatt tgagagcagt 360
gggtctgaaa atgtggttcc cagaccagca gcatcaa 397

<210> 1146
<211> 391
<212> DNA
<213> Homo sapiens

<400> 1146
cgttgctgtc gatcatttca tggaaatata ttttcttcac atttgggccc caacagcaca 60
ggtgttgcta tatttttgtg gtgaggaact gagacccagg gaagtcacgg tactttgccc 120
aaagtcaccc cgatgtcaag cgttagagca agaatttgaa ccccagagct taactcttaa 180
ccattttgct aactggctgt ctctccaggc ccccatcacc ctttccatca ccctcccctg 240
ccccaggggc atcctatcaa atggcagttc ccccctcgct tgcctcagca tctccaattt 300
agagcttcat ggatctcctc ctgttgaagt catgggatgg atttcccatc tcagaaactg 360
cacaagaaac aaccttggag ttttgaacaa g 391

<210> 1147
<211> 396
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(396)
<223> n = A,T,C or G

<400> 1147
ggcacgaggg ctgctccagc agcttggact cagagtgaga aggcataaag gagaatgccc 60
agctgacttg tgcagtggtt aattgaaact attcaggcaa gagatgatgg tgtcttggac 120
caggggatga ggaaggctac aaaatgtgcc tacctgtatt ctgtgaggag aacgtgttcc 180
ctggttttag atactgtgaa gatggatcag gagagagttt atctagactg ttggggaaag 240
gtgttgcgat tccttcagct acacaggatt gaaaggagac atttctgaag gggaaaaagg 300
aaatgaaaga aaagatgttt cagattgagg atatgctgtg tggtgaactt gttcttcact 360
ctgttagggt tcacaaatga ctcttcactg ccctcn 396

<210> 1148
<211> 401
<212> DNA
<213> Homo sapiens

<400> 1148
ggcacgaggg acattgaagc aacactcagc gttgcctagc gttaaaggca ctgcagagaa 60
atgaggtgca gaggtggccc ctctgagtat ttatttgact caggtaccag tggtacatat 120
atacagtgta attatgacca ggctggtaaa attggctgct cgcaaacaat ccccttttt 180
cctggcagta tttggaattt atcatttatt aataactata catttttaaa ggcagaagaa 240
gaaaatctat ctatcatcta tctatctatc tatctatcta tctatctatc tatctatcta 300
tctatctaaa tgacctgaca gaagaaaact gttaaaaatg gatattattg gaggggattt 360
aaaacagtgg gtgtgaatta tcattctgat ggaaagaaaa t 401

<210> 1149
<211> 394
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(394)
<223> n = A,T,C or G

<400> 1149
cgttgctgtc ggtataagag cttttcaaga tatttctcga tttctgtaag cactggataa 60
ttaattcaag accctcccac tttctttgta ggaatagatg aggcaataat tttatgacta 120
taactgaatt ttttcacaca agaccttgag atttggtaga aaataggatc tgtttgatct 180
gcttgcctcg gcctcccaaa gtgctgggat tacaggcgtg agccaccacg cctggccctt 240

ttactgttct ataaaataag aagaataaaa ggggtatttg aggtacatgc atttgaagtt 300
cttagaatga gacctagcat gtaggaaaca ctcattgtta gttgctcctg ctattaatag 360
tagtaaatag gtcaacatga ctcagttaac attn 394

<210> 1150
<211> 370
<212> DNA
<213> Homo sapiens

<400> 1150
atacacttcg tcatttttt ttctctgaca gactcagcaa gaccaattat attatctaag 60
aactaaccaa ggaggtgtat agtttagaag agtcaagaaa aacaggtaaa atatagcaaa 120
tatgtaaaac aaaagaaaag ccactaaaat gcaaatttct gcctaagtat tatatgttat 180
atgctagaga acacagataa tcatttgacc aagtaggaag gaaaacaaga aaatgaaaaa 240
agtggaaaga agagaaagtt tgtaaatgaa aaaagtttca aatgctgagt ttctaaagaa 300
ctgagaaaaa aaattagaaa cagtgattac taaagaggat aaaatttttt ataaaccatg 360
acattttgca 370

<210> 1151
<211> 375
<212> DNA
<213> Homo sapiens

<400> 1151
agttcttaat ttttaaattt gaagtcaggt tttagcatct ttaagtttat tggctgtttt 60
ataaatgtat tattttccct gtgaaactcc tatttgaatc ttttataccc ccacccccctg 120
tccttttttcc ccttgtatct ttttaaaaaa ttgatttata aaagcacttg tgaggctgag 180
gtgagtggag cacttgaggt caggagttct agaccagcct ggccaacatg gtgaaacccc 240
atccctacga aaaatacaaa agttagctgg gtattgtgga gtgcgcctgt aatcccagct 300
acttgtgaga ctgaagtgag acaattgctt gagcccggga ggcagaggtt gcaaagaact 360
cttattgcac tccag 375

<210> 1152
<211> 371
<212> DNA
<213> Homo sapiens

<400> 1152
tttcatttcc tgtgtggaaa acaattaagc ttataatttt gcgttttaca gaaacagaat 60
cacttaactt ctgaaaggag aaattaatcc taattaaatg aggctgcttt tttaaaatcc 120
agatattata tactggattg ctttggagaa aattttgttt tataccagta cctaaatagc 180
ttttaagagt tcaggttaac ctatgctgag gaaattaata gcaaaaagaa aaggccacaa 240
tcaagacgga aaggatttaa gttttattaa tgattattaa gtgcattatt tatagtagaa 300
tccccaacat atgctcacga aaataaacca gttctaataa atacatgata aagatcacaa 360
aattagaaga g 371

<210> 1153
<211> 298
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(298)
<223> n = A,T,C or G

<400> 1153

gatatatgta tttatgtcta aaaatggtga cctttaattt taattggggg gttggaaaga 60
gacagttgaa cttaaacaca cataaattat tcacttctca tcctattact tatcctatcc 120
accttaggtg aagagtaagc gtaagtattt ttttcttana tgctaagcac tggatgaaag 180
tcctctgaca atcacaacac tatttgtcaa tacagtagta aacatttgtt tcagatttaa 240
aaaagtcatt tatttccctt gcttataaaa taggagtcaa gagttatctg gctgtact 298

<210> 1154
<211> 381
<212> DNA
<213> Homo sapiens

<400> 1154
ttctagagca cgcaacctag atccctcaca tgtgcagttc acaatagggt tcacactcct 60
atgacaacct aatgctgccg ctgatctcac aggaggcgga actcaggtgg gtaatgctcg 120
ctggcccacc gttcgcatcc tgttgcacag tccagttcct aacaggccac ggaccagctg 180
aggacccctg ctctagagaa tcgccaaatg tgagggtggt catgaaagtt tcaaacaggt 240
gttaaaggca aagtgatata aaagaatcat cactgcagtt ttaaagagtc ctataaggaa 300
gaactctcat ctttttctct tgatcaaatt cactttcaga ccaaagaaac atgcatatag 360
aatttaagca gaatactgtg a 381

<210> 1155
<211> 394
<212> DNA
<213> Homo sapiens

<400> 1155
cgttgctgtc gagcgaatca cctgaggtca ggagttcgag accaacctgg ccaacatgtt 60
gaaaccctgt ctctactaaa aatacagaaa ttagccgggc atgatggtgg gcatctgtag 120
tcccatctac ttgggaggct gaggcaggag aagagcttga acccgggaag cagaggttgc 180
agtgagccaa gatcgcgcca ccgcactcca gcctgggcga caaagcgaga ctctgtcccc 240
ctcccaaaaa aaaaactggc atgtttcatt tattagatgt ttatttttc aacttcgctt 300
tttagaagtc atttagttag ggtcattcta aagggtgaag tattgagatt taatacagag 360
aagtctctga aaatgtttgg gccattgtat atta 394

<210> 1156
<211> 373
<212> DNA
<213> Homo sapiens

<400> 1156
agccctactc ctggggtggg agggggctgt aaatgggaat taaagtgttc aaatgagact 60
aaccgtaggg gtgaagaagg tgtgagaaag gaaaccagag cttggcttac tgcttaaagt 120
caggaagcga aactagctag tcttccctat aaagatagct taaagcaaaa caaaactagc 180
acaaatatat tgctagccac catggccaat aactgaatta ggccagttat tggttcagtg 240
gatacatctg tgagatcctt aatattgctg aagaacagaa gcacagaaac caccagagaa 300
gacttatgta agaatgggga tagaggttta aatcccatgg gtggcaggca gcaggcactc 360
acaaacacac acg 373

<210> 1157
<211> 369
<212> DNA
<213> Homo sapiens

<400> 1157
gcctcaagca gtcctcctgc cttgacctcc aaaagtgctg ggattacaag catcagccac 60
tacacctagc caaaatcttc attttagtac gatccaaggg tagtttgtat gatatatcca 120
ttaaagtttg agatacactt gtctataatt ttcctcaaat catgaaatga aactgaccac 180

aaaattttca aaaccactga gaaaattttt ttcaatgtgt gatctagaat agcttacacg 240
gcagttctaa ttattttgtt tgtttacact attttaaaga aaagttcggc cgggcacagt 300
ggctcacgcc tgtaatccca gcactttggg aggctgaggc gggtggatca cgaggtcagg 360
agatcgaga 369

<210> 1158
<211> 235
<212> DNA
<213> Homo sapiens

<400> 1158
ccacccagag ctggtgtcta catccttcag ccctgacttc cacgggtgcc actagcccca 60
gaaaacgcaa cgcgcctcag gttgaaatcc tcctcctctg aaatctatga gcctccgccc 120
ccttctcaga gacgttccaa gcctccactg gccccttcac cctctcgttt aagggcacca 180
cattctggcc cggcgcggtg gctcacccct gtaatcccag cactttggga ggccg 235

<210> 1159
<211> 378
<212> DNA
<213> Homo sapiens

<400> 1159
aaaatggaga caggcacact agcttcctca cagtagtagc tgtaaaattt acgtgaagta 60
acttatgcta actcatggca taatacttgg catatagtat acaatgacta attttaacta 120
ctactattat aaatatcttt attttatttt tttgagacag aatggtgctc tgtcccctctg 180
tcgccgagat ctgtagtgac cccatctctt gctttgagtg gggcgtccca agaattatag 240
gaacagggct gatgggcatt tcagccacaa caatgtcctt gacaacaaaa aaaagatcgt 300
gcttcaacaa cagaaatgca atgtttcttt tatcactttt cagtgtgatc acagtcattg 360
gcgctctgga ttgcatgg 378

<210> 1160
<211> 404
<212> DNA
<213> Homo sapiens

<400> 1160
cgttgctgtc gggaaaagag gcctgtttgt caattgtaca accgattgtg aagctctagt 60
gtgaatattt ttacgtctgt attagacatt ttctttgcaa atctattgtt cgattgaaat 120
gtaaatgaaa ttaaagatgg tgtacaccca tcatgtaaaa agcaggcacc atctctaaga 180
tggatttaat gctcattttt aaggcatata ctcagcttct atttaaaact ataatttaaa 240
ataattctgt acaatgaaat ggggaatata tatgggaata aattctattc catttatttc 300
aatttgaatt tccaaattgt aatgtttccc tttgtgctat aggaatagga ttaaatgggg 360
gaagactagg atttataagg cctgtatatg gggggagggc agag 404

<210> 1161
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1161
cgttgctgtc ggttgaagat atgaaatatg gctatttttа atggtgacaa ttatgacttt 60
tagtcactat taaattgggg ttacctatat cagtacaatt tgtagttgtt tccaggtttg 120
gctaataatc attccttaac ctagaattca gatgatcctg gaattaaggc aggtcagagg 180
actgtaatga tagaattaaa ttagtgtcac taaaaactgt cccaaagtgc tgcttcctaa 240
taggaattca ttaacctaaa acaagatgtt actattatat cgatagacta tgaatgctat 300
ttctagaaaa agtctagtgc caaatttgtc ttattaaata aaaacaatgt aggagcagct 360
tttcttctag tttgatgtca tttaagaatt actaacacag tg 402

<210> 1162
<211> 400
<212> DNA
<213> Homo sapiens

<400> 1162
cgttgctgtc ggtcttgctg taagagaaga acaactgatt tttctgattt cttaagcatt 60
gtaggctgtt caaatggtag acataatagt gagaagccac ctgagccagt caaacctgaa 120
gtcaagacta ctgagaagaa ggagctatgt gaattaaaac ccaaatttca ggaacacatc 180
attcaagccc ctaagccagt agaagcaata tgaagaccaa gcccagatga accaatgacg 240
aatttggaat taaaaatatc tggctcccta aaacaagcac ttgataaact taaactgtca 300
tcagggaatg aggaaaataa gaaagaagaa gacaatgatg aaattaagat tgggacctcc 360
tgtaagaatg gagggtgttc aaagacatac cagggtctag 400

<210> 1163
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1163
ggcacgaggc cgcacttctg cctgctgttt gcatttctcc tggactaagc tgctcttgtt 60
aatcacatgg atgttggcac agctgatgca cttgtccttc attactgtgg attatggaat 120
ttattggcat tggggagcaa caaggtgaga gcccttgaag atgactcaag aattcagcct 180
ggctcctgac taggaggatg gtgattctaa taatgaagag aatggggaag aagatggagt 240
tttgtgaaag agaggaaatt gtgattggtt aaggcatctg agccagcctg gctgtcaagt 300
atgagaaatg aggacatgat ttctggaaac agcatcccaa agatgccgtt tgcaggggaa 360
cctctactca gcacaaagca tttgagaagg gctggttact tg 402

<210> 1164
<211> 373
<212> DNA
<213> Homo sapiens

<400> 1164
ggattaggat cagaatggtt ttgtgcttct caacagccaa attagaattt agaaacaata 60
gagctatagg ccttcaaatt ctaaggagga atgatcgcca acctaacatt tgatacttgt 120
tcacagaatc aaatggatgt gacacgggaa taaagacatt gatagataca cacattctca 180
aaaccatttc cttcccacat acctcttctt aggaagtgac tggacgatga gttccatgaa 240
aataaggtat aaacaacgaa agatgaaaag atacggtata ggaaactggg agcaaatgga 300
attatcataa ccttgaaggg agaccccccc aggacagtgt gggttccata taataagggg 360
ttgggcctcc gtc 373

<210> 1165
<211> 397
<212> DNA
<213> Homo sapiens

<400> 1165
ggcacgagga gaacttgttt cataaatgga tatccctact atgactgtga aaacatgtca 60
agtgtcacat tagtgtcaca gacagaaagc acacacctat gcaatatggc ttatctatat 120
ttatttgtaa aaatccaagc atagtttaaa atatgatgtc gatattacta gtcttgagtt 180
tctaagaggg ttctttatgt tataccaggt aagtgtataa aagagattaa gtgcttttt 240
ttcatcactt gattattttc tttaaaatca gctattacag gatatttttt tattttatac 300
atgctgtttt ttaattaaaa tataatcact ggaagttact aatttgattt tataaggttt 360
ggagcattac agaataacta aactgggatt tataaag 397

<210> 1166
<211> 367
<212> DNA
<213> Homo sapiens

<400> 1166
atctcttcca agtatctttc aatcataatt acctattata ttcaagacac tgtgctaagt 60
actgtacaca gcatttccta accagtgtcc caggcagggc ttggccagct agagtcctag 120
accactagtc tcagtctgga ccatttcccg cagtgtgctt caaagattcc gtgtgtgtgc 180
catgatatga aaaaagtacc tgccctcaaa gaacttacaa tccagtaaaa agaataagta 240
cccaaatcac tgtaataaaa ggtagtataa ggccgggcgc agtggctcac acctgtaact 300
cagtactttg agaggccaag acaggcagat cacctgaggt caggagtttg aaaacatcct 360
ggccagc 367

<210> 1167
<211> 409
<212> DNA
<213> Homo sapiens

<400> 1167
cgttgctgtc ggttcatttg ctttagtctt agcgctttaa agaagtgtca taatgttcta 60
caaagacaca aagcttcagg cttatacaaa actgagtatg attagaaata cctgagccca 120
gaaatgattc tgagaaaaga gaataatttg aagacactta ttttaaagta attatggtta 180
gaaatgaatt aatttaaaca tgtgttcaca tatcccttc tctaacagtt taacctagac 240
aaacatctgt atcagtattt ttttattccc ctgattgatt acatttggtt tctttattct 300
gagaggagaa taacaaaaac ttcagaaatt cctaagggtg taataagaaa gtgggttttg 360
agtttccttt cctggaatta ttttacagtt ctttggtggg tctcgtcag 409

<210> 1168
<211> 405
<212> DNA
<213> Homo sapiens

<400> 1168
cgttgctgtc gatggattta aacattatag ctggagtggg gctggaaatc tttgtaaagg 60
aagttctttc agtaagatgc ccctgcttgt ctttgtctct tttttgttta acaaggtaac 120
tttttgttta acaaggtaac tttttgttta acctagattt tttttaaaac ttttttttt 180
tttcttatgg aaaaagtatt tctttttcag taaaggaaac ctgcccaaac caaacccaaa 240
attaaaaaat taaaaatatt ctctatccct actacctaaa aaaaaaccct tttaatattt 300
gggccggttc cctgccaagg ggtttttggg gaatacagga gaatttgggt ggtttttaaa 360
caaaacaagg ggaacattct gaacatactg gcttatagta gggcg 405

<210> 1169
<211> 404
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(404)
<223> n = A,T,C or G

<400> 1169
cacattccgt tgctgtccaa aagttgtaca aaaagtgatt tcatatttgg tttataagca 60
tttatatgtg ggggttattt ggtctttttgc tttttccatc ttaaatatca tcatggctaa 120
aacttaaggg tatttatagt ttaattccat ttcagtttta tagagggcag taattattct 180
gatgaatgtt gaattaagaa atggatattt tctttctctg ttgtgcagnt attggtagat 240

caatttctta taacccacaa tgtagcatca ataattgata gcatgtattt tatttaatta 300
cttgaattat ttagacttga tttctctaat ttttttccata aaaggactga acagcaccta 360
cttgtggtct ggacagctta acccaaagtt cctggaagaa taan 404

<210> 1170
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1170
cgttgctgtc gtgaagactg gatatcaaat atctgttttt agcatcctat agtctgcaca 60
tggtaaatac aacttgtgta cttagctctt cagaccacag ccctaatttt cattttcttg 120
tctttatcat attagaacta ctaagcagat ttccaaaaac aatccatgag atgaagttag 180
agggatagaa ggaggacaat ctgaaaaata tgaagtgatt aaaaaacatt gttctagcta 240
gttgctcaca ttcaaaaaaa atgttaaaac ccaattagaa acaaaagtca tagaaaatgt 300
gagcatattg tgttccttaa ataaccagat gttctttcct tcctgaaggc agtaagggct 360
aggaaaaaag gtttaaaact attgttttaa gttaacggtg ag 402

<210> 1171
<211> 398
<212> DNA
<213> Homo sapiens

<400> 1171
gcacgagggc atttgtttaa tttatactgg ttacttattt acgggggagg ggacatgaag 60
gtaggtaaat aggtaggcct ctaattgaac cacctctcta agttatgtac gtatatataa 120
gctgaaattg tgtttgacat tctgagggtt ttctttttct ttttcctttt tttttttttg 180
gggggggggcc gggggggaaaa actttttttt taaccccggg ctgaataccc acgctaataa 240
tcaaatataa atgagccctc gccttttgaa ataaaggaga ttccccggcc aaacttttttg 300
gagaactgga aaaaaaaggg cccccccaccc acccccttat attttgtttt taaagaagag 360
ggaagtttcc cctttgaggc ccaggccggt cttaaccg 398

<210> 1172
<211> 400
<212> DNA
<213> Homo sapiens

<400> 1172
tcccactcga ttcgaattcc gttgctgccg atgtggcttt tatttgtact gctcatatcc 60
actgtacagc cacttgggag tatcgtgcgt agcttgcagc aactgctgac tgcatttata 120
ctggttattg catattcttt tccctggaag cgaaagagaa atgtttttct tgttgcattg 180
attacatttt ataaatttgc ttaactggaa agtttgggaa aagaagcctg tttgtcaatt 240
gtacaaccga ttgtgaagct ctagtgtgaa tatttttacg tctgtattaa acattttctt 300
tgcaaatcta ttgttcgatt gaaatgtaaa tgaaattaaa gatggtgtac acccatcatg 360
taaaaagcag gcaccatctc ttagatggat ttaacgctcc 400

<210> 1173
<211> 397
<212> DNA
<213> Homo sapiens

<400> 1173
cgttgctgtc ggtcttgctg taagagaata acaactgatt tttctgactt cttaagcatt 60
gtaggctgtt caaaaggtag acataatagt gagaagccac ctgagccagt ccaacctgaa 120
gtcatggact actgagaaga aggagctatg tgaattaaaa cccaaatttc aggaacacat 180
gattcaagcc cctaagccag tcaaagcaat atgaagaccg agcccagatg aaccaatgac 240
aaatttggaa ttaaaaatat ctgcctccct aaaacaagca cttgataaac ttagactgtc 300

atcagggaat gaagatcata agaaagaaga agaccatgat gaagttaaga ttgggacctc 360
atgtaagaat ggtgggtgtg caaagacata ccagggg 397

<210> 1174
<211> 369
<212> DNA
<213> Homo sapiens

<400> 1174
tactcatata atcttcatta caaccatctt agtaacctgt agttacaaga aaaacaaaaa 60
tgttaagttg taggaatcat attctccaaa ttattttaca ttaaagacca ctgacaaagg 120
aatcactaga gatgttattc cactatcacc aaatagtata ttgttaccat ctgttaacct 180
acaaccttgg gtaagatggg ataagttaac atcagttgca acatacacat tcaatgtaaa 240
atagctttaa cacaataaca actattttgg tttattgaaa caagttcaca cattgtcatt 300
aaaaaggcat tttgaattca ctgtattttt attaccttaa ttctgttgaa catgggaaag 360
agcctggtc 369

<210> 1175
<211> 405
<212> DNA
<213> Homo sapiens

<400> 1175
tcgaattccg ttgctgtcgg tctccttgaa aagttgatgg tcctgcagcc gcacaggcag 60
ttgtgggcat ggtgggcgct gagtctggag gttgttcaag gccagcagcg ttgcccggag 120
ccctgctgct gacgctgccg tcactggttc tagctctcac attctcagct gcacgtttct 180
gtttccacct cagtaaacgc aaactcttgt tcataggcac agctgtcact gcagcacaca 240
aggactcagg tttgtaaaga caaacgattg atttgtgtgt gacgtgctgc ttgtttgcac 300
tggattttgc aaattattta ctaaagaaaa gtacttcaga ccttttgtgg cagacaataa 360
atacagcgat actctaatct tcagtattca taaaaatggg tgaag 405

<210> 1176
<211> 408
<212> DNA
<213> Homo sapiens

<400> 1176
tcccatcgat tcgtttgaca tagagtgaat gcattttccc ctctcctcct ccctgctacc 60
attatatttt ggggttatgt tttgcttctt taagatagaa atcccagttc tctaatttgg 120
ttttcttctt tgggaaacca aacatacaaa tgaatcagta tcaattaggg cctggggtag 180
agagacagaa acttgagaga agagaagtta gtgattccct ctctttctag tttggtagga 240
atcaccctga agacctagtc ctcaatttaa ttgtgtgggt ttttaatttt cctagaatga 300
agggactgaa acaatgagaa agaatacagc acaacccttg gacaaaatgg aattagaaaa 360
tatatttagg tttatagcag aagcaagttc aattggttgg ttggaaag 408

<210> 1177
<211> 369
<212> DNA
<213> Homo sapiens

<400> 1177
aggcccagag tcgggggaag ttttgtgaga gaagccacat tagagaccag aggagaagta 60
ccaatttggg atgaccttct accaaagacc tcaccgattt caaggacagc tcagctgttc 120
ctatcctctt tccctcattg cactgttttc tgtttatatt tatatataca tttgtaatta 180
cttgactaat atctgcacac attgcctgct ctaagctctt cagcatcagt ctttttatc 240
attttgtccc acagtgtttg acaagcaata gttactcaat aaatatcatt tgaatgaatg 300
aatgaaccag taaacgaagt gacatttgaa tatgcaagaa acccctaagt ttgagaatcc 360

tgttggcag 369

<210> 1178
<211> 363
<212> DNA
<213> Homo sapiens

<400> 1178
gacagatagg agaaagctat catatattat gttctgtaga atgcttcttt tggtggcatc 60
agaagaaatg acccatgttt gaagatctga atttaattaa gtctacacag aatatagttt 120
aaaggcgtga agactttgct attagtataa taaatacttt ttcttaagac attgtttatc 180
tacagaagga ctaccatatt caagatttaa aggtagattg tttttgttca catcattttg 240
atcttaggtt ttgctggaag cattcacatt aaggggggcct ttaatttatg tatgctttaa 300
gaatacttaa tagctaatct acatattaaa aaaaaaaata ccggcctagg ctcggtggct 360
taa 363

<210> 1179
<211> 361
<212> DNA
<213> Homo sapiens

<400> 1179
gaggattgta acagggaaag catttagggt tttcaggcag aggaacagtt ggccaaggaa 60
gtcagcttct cagagctcaa gagtagatct gagtttaact cattaaagat ggcatggaag 120
agcagtgtca taatgcaaat gggaagattt cttctcttag taattttatt tctgccacgt 180
gagatgacaa gttctgtttt aactgtgaat ggtaaaactg agaactatat cctggatact 240
acacctggct cccaagcatc tctgatatgt gctgttcaaa accacaccag agaggaagaa 300
ctgctctggt accgagagga ggggagagtg gatttgaaat ctggaaacaa aatcaattcc 360
c 361

<210> 1180
<211> 369
<212> DNA
<213> Homo sapiens

<400> 1180
cacatgcaac agaaaggcac agttttattt caaacaaagc agtgttttgc tgtaacaccg 60
ttaaaaactg gaaaggaaaa ctcaatcaaa ccaaaaacta gatgcttagg aataaatggt 120
agaattctta caaaaccacc acgcttcaat tcaatctaaa tcaattcaac aaatctgtgc 180
tgaaagtata acatttagtt ttcttagaca ccaaatgaac aatacaaaat ccctcaaggg 240
acttagaaca ttcaagtttt ctatatctgt ggttctaagt ctgttaccaa cttccaggac 300
tctgcttctt tccctctgcc cattaacaat gcggggttaa aagtgacttc ctaccactat 360
gtttcttac 369

<210> 1181
<211> 407
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(407)
<223> n = A,T,C or G

<400> 1181
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cgggaaaaga agactccaaa tccactctct gctcgccccc agggcaatgc tgccaggaga 120

gggagtgggt tcccccgcag gctatcccac cgatggggct gagagcttaa tttggggttt 180
tatttgaatt ggagacattg ttccctcttc gctcctctac cccataaaat tccctacaaa 240
tgcaaaaatt cgagatagaa gaagccgtcc ctgaaagtaa gttctgaagg attcctttca 300
tgcggtgaag gaacaacaac aatattcaac ttcaccttgg tgtgtgaggg tcgtcgtgtt 360
ttaaaacact atcgctgtag aaagattagt gaaatgtatt ggaagan 407

<210> 1182
<211> 411
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(411)
<223> n = A,T,C or G

<400> 1182
cgttgctgtc ggaaaaaggt gggggggacca ggggaagact cggagtgcga tggcggcgca 60
aattccaatt gtggccacca cttccactcc cggaatagtc cggaacagca agaagaggcc 120
ggccagccct tcccacaatg gcagcagcgg cgggggctat ggcgccagta agaagaaaaa 180
agcgtccgct tccagctttg cgcagggtat cagcatggaa gccatgagtg agaataaaat 240
ggtgccctct gagtttagca caggacctgt ggaaaaagct gccaaacctt tgccatttaa 300
ggatcccaac tttgtgcact ctggccacgg tggcgcagta gctggcaaga agaacagaac 360
ctggaagaac ctgaaacaaa tcctcgcttc tgaaagggca ttgccgtggc n 411

<210> 1183
<211> 404
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(404)
<223> n = A,T,C or G

<400> 1183
ggcacgaggg tggctgcagc cgctggcccg aaaatgctgc tcgggcgagc aggggtcagg 60
cgggaaaaga agactccaaa tccactctct gctcgccccc agggcaatgc tgccaggaga 120
gggagtgggt tcccccgcag gctatcccac cgatggggct gagagcttaa tttggggttt 180
tatttgaatt ggagacattg ttccctcttc gctcctctac cccataaaat tccctacaaa 240
tgcaaaaatt cgagatagaa gaagccgtcc ctgaaagtaa gttctgaagg attcctttca 300
tgcggtgaag gaacaacaac aatattcaac ttcaccttgg tgtgtgaggg tcgtcgtgtt 360
ttaaaacact atcgctgtag aaagattagt gaaatgtatt ggan 404

<210> 1184
<211> 403
<212> DNA
<213> Homo sapiens

<400> 1184
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ggtgtcttgg accaggggat gaggaaggct acaaaatgtg tctacctgta ttctgtgagg 120
agaacgtgtt ccctggtttt agatactgtg aagatggatc aggagagagt ttatctagac 180
tgttggggaa aggtgttgcg attccttcag ctacacagga ttgaaaggag acatttctga 240
aggggaaaaa ggaaatgaaa gaaaagatgt ttcagattga ggatatgctg tgtggtgaac 300
ttgttcttca ctctgtaggg ttcacaaatg actcttcact gccctcttgg atgaaataaa 360
ctggttccca tagaaatgga ccgtctctga tttcacagtc taa 403

<210> 1185
<211> 394
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(394)
<223> n = A,T,C or G

<400> 1185
gcgttgcggt cgcaggatga ttctgaggat gactacggtg aatttctgga tcttgggccg 60
gctgggggct ctgaattcac taagccaagt ggccaaacag aaagagaacc caagcctgga 120
ccgagtcata accaagcagc aaatgacatt gtcaacccca gatcagagca gaaagtcatc 180
atcttggaag aaggtagcct tctttacaca gaaagcgatc ctttggaaac tcagaaccag 240
tcatccgaag actcagagac agagctgtta tcaaatctag gagagtcagc tgctctagca 300
gatgatcagg ccatcgaaga agactgctgg gtagatcatc cttacttcca gtctctgaac 360
caacagcccc gtgaaataac aaaccaggtc gttn 394

<210> 1186
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 1186
ttccttcctt ctctctagca tcatattctc agaaattctt cctgtgttgc tccattccag 60
ttcttataag tgattgttgc atgtggtttt gtctagattt atctgttttt ggtggaagag 120
ttattttaat acaagctgca ctggaactga cttttgaatt gaaacctctt tccatgcttg 180
gttcaaacca atccctatac gtaatggtta tgagcccaga gttggagcca gggtcctgaa 240
ttcccacctc tgacactntc tggctcttaa tctctgacta tttgcttaac atctatgtgc 300
ctccatttct atataacggt ttttacgggt tttatttatt aaacaaatgg ggatacccgg 360
accccgcgtg acacctggtc aatcg 385

<210> 1187
<211> 365
<212> DNA
<213> Homo sapiens

<400> 1187
atttcctttg tgtttttctg taatttacag atttttttte ctcagtgagc aagtattact 60
tttataaacc gaaaaaaccc tgtatttttc atcgagtatt taattaactt atgaagaagg 120
ttattcattg tggcattgtt tgagtataaa ataacgaagt ccaacaacag aagacgggtt 180
aaataaatca tgttatgtcc atgctgtgaa aactatgcaa ctgtttaaaa aaatgagaca 240
catctatatg taccattatg gaagaatccc aaactataag gatccactga aaaacaaaag 300
gaaaaaaaag atgaacaacc actttggaaa gcagtttggc atgatttact gaagtcaaag 360
gtatg 365

<210> 1188
<211> 362
<212> DNA
<213> Homo sapiens

Table 5

SEQ	CLST	Library Pair A,B	A	B	A/B	B/A
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	118		17.28
		01,02 (Colon, High Met vs. Colon, Low Met)	25	4	5.76	
164	561734					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	0	6		5.68
165	4420					
		03,04 (Breast, High Met vs. Breast, Non-Met)	6	0	5.85	
		01,02 (Colon, High Met vs. Colon, Low Met)	1	10		10.84
166	559663					
		15,16 (Normal Colon vs. Colon Tumor Tissue)	15	4	3.96	
167	7082					
		03,04 (Breast, High Met vs. Breast, Non-Met)	10	0	9.76	
168	2315					
		03,04 (Breast, High Met vs. Breast, Non-Met)	7	118		17.28
		01,02 (Colon, High Met vs. Colon, Low Met)	25	4	5.76	
169	650472					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	6	0	6.44	
170	6482					
		01,02 (Colon, High Met vs. Colon, Low Met)	0	6		6.5
171	4584					
		01,02 (Colon, High Met vs. Colon, Low Met)	1	11		11.93
172	453846					
		15,17 (Normal Colon Tissue vs. Colon Metastasis)	0	11		10.25
173	650820					
		16,17 (Colon Tumor Tissue vs. Colon Metastasis)	8	0	8.12	
174	642906					

ggcagcccaa ggaaggccaa cgtggaggcc tcacgcagct ccacagacag ccccagctcg 240
gtgttcctca gctcagaggc tgagaatggt gtggaggaga aaaagaaagc ctgcaggtcg 300
ccaacagccc aatcccctac cccatctgtg gaggcggact cctcagacca gaagaanatc 360
attagcctat ggtcn 375

<210> 1192
<211> 394
<212> DNA
<213> Homo sapiens

<400> 1192
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tcctctgcag gcaccgagtg agcagcgctg ggattctggg actggagagg gccctgggaa 120
ccctccaggc ctgccccctg gtgggtgagc ctggttctgg ggcctcccgg agaatttttt 180
ttttcctgga aaagagggag ggtaggggtg gagcgtgaca cctgggcagg tgtcccttgt 240
ctccatcctg gccctgcatg ctgttaactc aggtggtgtg gctgcccgag cctgggcaca 300
gccaccgctt ccaggtgctg agtgtggcca ccgacgggaa ggtgctactc tggcagggca 360
tcggggtagg ccagctgcag ctcacagagg gctg 394

<210> 1193
<211> 395
<212> DNA
<213> Homo sapiens

<400> 1193
gagcatatta tcaaggtaaa atgcagcgtg aatagtacct gacaattttg aaagctgtta 60
aagtccttca ggcaagtttt agaggagtaa gagttagacg gactcttaga aagatgcaga 120
ctgcagcaac actcattcag tcaaactaca gaagatacag acagcaaaca tactttaata 180
agttaaagaa aataacaaaa acagtacagc aaagatactg ggcaatgaaa gaaagaaaca 240
tacaatttca aaggtataac aaactgaggc attctgtaat atacattcag gctatttta 300
ggggaaagaa agctagaaga catttaaaaa tgatgcatat agccgcaact ctcattcaga 360
ggagatttag aactctaatg atgagaagaa gattg 395

<210> 1194
<211> 408
<212> DNA
<213> Homo sapiens

<400> 1194
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tgaacttggg tggggtgggg acttgttcct cgggggccac ctttgtgtcc ttgtcagcgg 120
tcgtcctgct gtggcctggg ttgcatttcc tcttgggggg ggtattgagg acccccagcc 180
tggaatgaga agggtccccg gctccatgtc agaacccaga aaggtggatc cccccactgt 240
tgactgcatg aagtttttgg taccccccct ttggtccaga acccgtctgc ctttcccttg 300
gggacaaggg ggccttttga tggcactggt tgtgacctgg acccagcccc gcgctggcat 360
gatccagaaa tggggcccgg acatccttgc gggcaggagg caccgtcc 408

<210> 1195
<211> 362
<212> DNA
<213> Homo sapiens

<400> 1195
agatcagaat aagagtctct aggttatctg ctcaacagaa gctaagacca ctctgatagt 60
cattataaca gtttttcttt agttacttcc ataattagat ttgtttttt aaaaagcttc 120
cccccgctga cttttcttta aacatggttt taaaggatgt gatcaattta gtaatgagga 180
agttgttgaa ggatgtctgg ggttaagaag ctgaaagctg acagattcag tgtaatccct 240

ttccccacag gggctgctgg agtcctctgc agagaaggcc cctgtgtcgg tgtcctgtgg 300
aggtgagagc cccctggatg gtatctgcct caacgaatca gaacagacag tcgcgctttt 360
ct 362

<210> 1196
<211> 388
<212> DNA
<213> Homo sapiens

<400> 1196
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tttgggggca gttgggaaaa aaaaaatggt taaataaaaa agggttttgt tggggttgcc 120
cggaaaaacg gttatttttc tccctatggg gaaactgggg gagtacgcta aaattttgcg 180
aaccggggtt gggttaaacc ccccccacgg gcctcttttg cgggttaaaa ttggaagagg 240
ggggaaaagg tttcctttta tgggggggaa aattggattt atagtcaaaa gggggcctat 300
ttttctgcct gagaaaaaaa ccccccggag ggccaagggg gtccctggat aaccccccgg 360
aaccaaaaag gaaaggggge gcttcctt 388

<210> 1197
<211> 408
<212> DNA
<213> Homo sapiens

<400> 1197
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acgggcaagg agctgagata cgagggcctg atgggcaaac ccagcatcct cacttaccag 120
tatgccgagg acctgatcag gcgacaggcg gagaggcggg gctgggccgc ccccatccgg 180
aagctctatg ctgtgggtga taaccctatg tctgacgtat acggcgccaa cctgttccac 240
cagtacctgc agaaggcaac gcatgatggg gcgccagaac taggggccgg gggcacacgg 300
gagcaacagc ccttagcaag ccagagctgc atcttcattc tggtgtgtac aggcgtctaa 360
ccatcccagg aaccccaaca gtccacggag cctggtcctt ggaagagg 408

<210> 1198
<211> 393
<212> DNA
<213> Homo sapiens

<400> 1198
ggcacgaggg aacatgggct ttgcagcaaa agcgatgaaa tctgttcatg aaaacatgga 60
tctgaacaaa atagatgatt tgatgcaaga gatcacagag caacaggata tcgcccaaga 120
aatctcagaa gcattttctc aacgggttgg ctttggtgat gactttgatg aggatgagtt 180
gatggcagaa cttgaagaat tggaacaaga ggaattaaat aagaagatga caaatatccg 240
ccttccaaat gtgccttcct cttctctccc agcacagcca aatagaaaac caggcatgtc 300
gtccactgca cgtcgatccc gagcagcatc ttcccagagg gcagaagaag aggatgatga 360
tatcaaacaa ttggcagctt gggctaccta aac 393

<210> 1199
<211> 400
<212> DNA
<213> Homo sapiens

<400> 1199
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atctcggggg gccacgacta ccaaattggc ccctaccgca agaacctgct atgctacgac 120
caccggacag acgtgtggga ggagcggcgg cccatgacca cggcgcgcgg ctggcacagc 180
atgtgcagcc tgggtgacag catctactcc atcgggggca gcgatgacaa catcgagtcc 240
atggagcgct tcgacgtgct gggcgtggag gcctacagcc cgcagtgcaa ccagtggacc 300

cgcgtggcgc cgctgctgca cgccaacagc gagtcgggcg tggcagtgtg ggagggccgc 360
atctacatcc tgggcggcta cagctgggag aacactgccg 400

<210> 1200
<211> 408
<212> DNA
<213> Homo sapiens

<400> 1200
ggcacgaggc ctctcggcgc ttggatatta atacggtcac cgtggagttt ttcctggtgg 60
gacaagacaa cgggccggtg gaggtgtcca cattgcagtg cttagcgaat gccacagacg 120
gcgtgcggct agcaacccgc atcgtggaca caccctgcaa tgagatgaac accgacacct 180
ttctcgagga gattaacaaa gttggaaagg agctggggat catcccaacc atcatccggg 240
atgaggaact gaagacgaga ggatttggag gaatctatgg ggttggcaaa gccgccctgc 300
atcccccagt cctggccgtc ctcagccaca ccccagatgg agccacgcag accatcgcct 360
ggggggggcaa aggcatcgtc tatgaacctg gaggcctcaa catcaaag 408

<210> 1201
<211> 381
<212> DNA
<213> Homo sapiens

<400> 1201
ggagcggagc ccggagcgtc gtggaaagca ttggacacat ttccaccatg ctaatggcat 60
tttaaatata tttggcaatt ttcccaattt tttactgaag aaaactgtaa gtttatactt 120
gaggactgaa gtgtgactct gccgattatc acgctttcaa gatgaatctg gaaaaactca 180
gcaagcctga actcctgaca ctatttagta ttcttgaagg agagcttgaa gcaagggacc 240
ttgttataga agccttaaag gcccaacaca gagatacttt cattgaagaa cgctatggaa 300
aatataacat cagtgatcct ttaatggctt tacagagaga ttttgaaaca ctgaaagaga 360
taaatgatgg cgaaaaggcg g 381

<210> 1202
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1202
ggcacgaggg gatgtctctg gcgtggtgat ggaatgtggg cttgatgtga aatacttcaa 60
gcctggagat gaggtctggg ctgcagttcc tccttggaaa caaggcactc tttcagagtt 120
tgttgtagtc agtgggaatg agggctctca caaacccaaa tcactcactc atactcaagc 180
tgcctctttg ccatatgtgg ctctcacagc ctggtctgct ataaacaaag ttggtggcct 240
gaatgacaag aattgcacag gaaaacgtgt tctaatctta agcgcttcag gcggagttgg 300
tacttttgct atacaggtaa tgaaagcatg ggatgctcat gtgacagcag tttgctccca 360
agatgccagt gaacttgtaa ggaagcttgg tgcagacgat gt 402

<210> 1203
<211> 396
<212> DNA
<213> Homo sapiens

<400> 1203
atcccatcga ttcgaattcc gttgctgtcg gcccggtggt gctgaagtgg aagcactgtc 60
cccgatgggg ctgcctgggg aggaggattc aggtcctgat gagccgccct caccccgtc 120
aggcctcctc ccagccacgg tgcagccatt ccatctgaga ggcatgagct ccaccttctc 180
ccagcgcagc cgtgacatct ttgactgcct ggaggggcg gccagacggg ctccatcctc 240
tgtggcccac accagcatga gtgacaacgg aggcttcaag cggcccctag cgccctcagg 300
ccggtctcca gtggaaggcc tgggcagggc ccatcggagc cctgcctcac caagggtgcc 360

tccggtcccc gactacgtgg cacaccccga gcgctg 396

<210> 1204
<211> 409
<212> DNA
<213> Homo sapiens

<400> 1204
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ttgctagtac agcgtttgct gaaaatagaa attctgagac tagtgatact actgggaccc 120
atgaatctga tagaaacaag gaatccagtg accaaacagg cattaatatt agtggatttg 180
agaacaaaat ttcatacgta gtgcaaagct taaaggagta tgaggggaag tggttgcttt 240
ttgatgattc tgaagtcaaa gttactgaag agaaggactt tctgaattct ctttcccctt 300
ctacatctcc tacttctact ccttacttgc tattttataa gaaattatag agtgagtgta 360
ttttccttgt gtatatatta aacacaccca tacaaacatt ggtaaagtc 409

<210> 1205
<211> 399
<212> DNA
<213> Homo sapiens

<400> 1205
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acgcacagaa ggaacttcag aagttaagaa aacatattca agatttaaac tggcagagaa 120
agaacatgca actcacagct ggatctaaat tgagagaaat ggagtcaaat tgggtatccc 180
tggtcagtaa gaattatgag attgaacgga ctattgttca gctagaaaat gaaatctatc 240
aaattaagca gcaacatgga gaggcaaaca aagaaaacat ccggcaagac ttctgaaaag 300
acaatttagc aggtagaaga aaagttgggc tttcacaaaa ggcatctgaa cttttaatga 360
actttgaagg acaacagcat cttcccaaaa ccattggtg 399

<210> 1206
<211> 403
<212> DNA
<213> Homo sapiens

<400> 1206
tcgaattccg ttgctgtcgg cctgggaaac taaaattatt tccagagaga aacgacagct 60
gcgtaaacgt gataaggtgc tgactgattc tggttcattg gattcaacta tccctgggat 120
agaaaatacc atcacagtta ccaccgagca acttacaacc gcatcatttc ctgttggttc 180
caagaagaat aaaggtgatt ctcatctaaa tgttcaagtt agcaacttta aatctggaaa 240
aggagattct acacttcagg tttcttcagg attgaatgaa aacctcactg tcaatggagg 300
aggctggaat gaaaagtctg taaaactctc ctcacagatc agtgcaggtg aggagaagtg 360
gaactccgtt tcacctgctt ctgcaggaaa gaggaaaact gag 403

<210> 1207
<211> 399
<212> DNA
<213> Homo sapiens

<400> 1207
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gtgccgggct gagagcgtgg gtctctacct ctgtctccac ccgcaagtgc tggagatctt 120
tggctttgag ggggctgatg cggaggacgt gatctacgtg aactggctca acatggttcg 180
ggccgggctg ctcgctctgg agttctacac acctgaggcc ttcaactggc gacaggccca 240
tatgcaggcc cggtttgtga tcctgagagt cttgctggag gctggcgagg gactcgttac 300
catcactccc accacaggct ccgatgggcg cccagatgcc cgggtccgcc tcgaccgcag 360
caagatccgg tctgtgggca agcctgctct agagcgctt 399

<210> 1208
<211> 349
<212> DNA
<213> Homo sapiens

<400> 1208
tataaatatt attgtatctg ctttcatttt attaaaatta tcatttattt tgtttataat 60
cagcaatgca ttatattttt gaactatgca atatttactt tatttttta gcaactcctt 120
ttcaagaaac tttttttaac aatcaaaata cacaatattt taaatagcaa ctgttattcc 180
aatattctat ataaaatatg tcacgtacac aaaaagtcag gtttgtcaga tattatgaaa 240
tctgtatata aaatatacac atatacatat atgtatacat atacaagcat aagtacttat 300
ttattatagc aatctatgct ttttgaaaga cagtatggaa acaagtgaa 349

<210> 1209
<211> 350
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(350)
<223> n = A,T,C or G

<400> 1209
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ttgtaaataa gtaaggataa tatttttttac cccacacaac tattaagaga gttagatggg 120
gaaaaatgca tggataatat gggctacctt ggttgaagct gaggctcagc tatacctaca 180
tgtgaatttt gtcactatgt acattggttt tgagcagtgt gacttttca ctcagacaaa 240
tgtcttagag ctctatgtat gttagaacaa agagagtggc ctcctgcctt ttanagagcc 300
ttacaatatt tcatagtagg tattatgcaa acagaataca aaaaagagct 350

<210> 1210
<211> 336
<212> DNA
<213> Homo sapiens

<400> 1210
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gccaactaaa gttgtatttg taaaagtaat gctatgaata ttactatttg acctagacac 120
ataggttaga attggaaaca caggctataa agtatagtaa ttgtgtaatt gtgaaaatat 180
taaggcttca actcaaaact gaaacacagt agggcttaga aatctttgaa ttatttatac 240
ccctcagttt aaaaacttcc agtccaggcg cagtggctca tgcctgtaat cccagaactt 300
tgggaggcca aggcaggcgg atcacctgag gtcagg 336

<210> 1211
<211> 339
<212> DNA
<213> Homo sapiens

<400> 1211
ccaaggtacg gctgctagaa cacgaccgaa gggccatagc taaattatct aactatgtta 60
taaacattgg gaataactat gttataaaca ctgggaatta cagagaacta gtctggaatg 120
gggctgactc taaaaatgct tataatcgct tggagaaact tggtcgtgaa taccaagaca 180
ataaaagtca aacaaaatcc ttaatttagt ttactgcagt tgttcatgtg gcactgggcc 240
ctatggaagc ccaaaaaaag tattcgtatt ataagtaaag ctgtgccaaa acatgttaaa 300
gacttatatt tctttatact tatagaaata tttagagag 339

<210> 1212
<211> 310
<212> DNA
<213> Homo sapiens

<400> 1212
cgggtgataa ctttttggtt acctgaagca tttatgaata caggtaagtc tgtggctatg 60
ttatagaata ttgaggtctc cattggtttg acttccaaat tagcgcttta ttaaactcgg 120
tgtcagtgtt tgtacaccta cttgggctgt atcttttcta ctgtgaaaca tattttaact 180
gtgaaatgaa tattttaaag aatcaccttg gggccaggca tggtggctca tgcctgtatc 240
tccaggactt tgagaggcca aggtgggtgg atcacttgag gtcaggagtt cgacacagcc 300
tggccaacat 310

<210> 1213
<211> 359
<212> DNA
<213> Homo sapiens

<400> 1213
aggtgggttt gtctagtttt atctgttttt gggggaagag ttattttaat acaagctaca 60
ctggaactga cttttgaatt gaaacctctt tccatgcttg gttcaaacca atccctatac 120
gtaatggtta tgagcccaga gatggagcca gggtcctgaa ttcccacctc tgacacttct 180
ggctcttaat ctctgactat ttgcttaaca tctctgtgcc tccatttcta tataagtgtt 240
tttaccggta ttatttattt aataaatgga gaaacaaaga cccaacatga cacctggcaa 300
tttggtggca gaacctaaat ctcaggtgtc ctaacttcca gtccaaagca tagagaaaa 359

<210> 1214
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1214
ctttactttg cagtagttgc tcaaaattac gagtaaaaga aaggaaaata gatagcttca 60
ggaatgatgg aggggagagg aatggcctaa aagcaggatg catagtggtg aaaagtaaac 120
tattttacag cttcatctgg agttggacca atatagcata aaacatttga agttagtatg 180
attgtctgta gccatgtggc tggatgaatc cacaatgatc gttaaagggg ccactgacaa 240
ataccataca aaaaactgtg acttatctac ctagtcattt acatcattat acttctcaca 300
gtgaagaatg agaaagtatt ttaaaagtag acatagcttt aaaagatgtg ctctg 355

<210> 1215
<211> 340
<212> DNA
<213> Homo sapiens

<400> 1215
tacattgttc aggtcttctg tgttcttacc caggccccac tcaacctttg agctattcca 60
gtatgagagt gaattagacc tcccactatc acggtcttac tgtcatttct catggcatta 120
gtcttaatat tttttatatg gtaattctat gttcaagact gtgaacatat tcaggttcca 180
agttattttg tgttcattaa aaattttact ttgaatcatt atgaatagtt cctaggttga 240
gcttcgggct ccctgacccc agagcagttt ccatttgcac gtgttgacca tattctctaa 300
cccgtcccat aaaattgatt ctactatttc ctgcttttgg 340

<210> 1216
<211> 358
<212> DNA
<213> Homo sapiens

<400> 1216
agaaattgaa ctgaaccgta aaggatagct gagaacagaa aatgcttgag aagaatattc 60
ccataaagaa gtgataggaa ttaaaacagc aaatacagtt tgataccagg taatagagtg 120
gcttgaatcc agtttaggga atttggtttg ggtgtgtata tgtgtgtgtg tgtgtgtatg 180
tgtgagagtg tgcgtgtgcg tgagagagag agattgcaca tatatattga cgtgtgacta 240
aatagcggct gcaacctgaa cagtctatac tcttggaaac ccacggggtg acattgtctt 300
gtgcctggta ttggaagcac ttattggcag gcagatgatg gagacttagt atcgaggg 358

<210> 1217
<211> 340
<212> DNA
<213> Homo sapiens

<400> 1217
tatctacggg atcataagtc taggtgtcta taattcagaa aactaccttt cattgtgtat 60
ttgatgtttt tgtatatcca gagcgtatta ataaattgaa ttttaaaagt ctcttaaatt 120
aaaggagcta ggttgggcgc agtggctcac ccttgcaatt ctagcactta tggaggccga 180
ggctggtgga atcttcagag gtcaggagtt caagaccagc ctgaccaaca tggtgaaacc 240
ccgtctctac tataaataca aaattagcag ggcatggtgg catatgcctt gaatcccagc 300
tactcgggag ggtgaagcag gagaatcacc ttgaacccct 340

<210> 1218
<211> 353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(353)
<223> n = A,T,C or G

<400> 1218
aggcagaaat ttcccataat ggtttacaag cttggtggaa tatcaaaccc catcagctct 60
tggaatggaa aagaagttct cacacaaatc taagacctac caataataaa gataaaaaca 120
aacaaccaac aaaaaaaatt ttcaaacaaa aagaaaaaaa gggacccccc ccctttttt 180
tggaaaaacc ctggttttta aggccccca ttttttctcc taccaaaaaa aaaatttggt 240
acaatttttt caaaaaaaaa aaaaaatgtt gggaaatttt ttaaacggcc cccaatttag 300
gcgccaataa atgggcgaaa aaaaaaaaaa attttccctg gttttaaaaa ccn 353

<210> 1219
<211> 385
<212> DNA
<213> Homo sapiens

<400> 1219
cgttgctgtc gataaagtat tgtaaataga atagtgttga agatatgaaa tatggctatt 60
tttaatggtg acaattatga cttttagtca ctattaaatt ggggttacct atatcagtac 120
aatttgtagt tgtttccagg tttggctaat aatcattcct taacctagaa ttcagatgat 180
cctggaatta aggcaggtca gaggactgta atgatagaat taaattagtg tcactaaaaa 240
ctgtcccaaa gtgctgcttc ctaataggaa ttcattaacc taaaacaaga tgttactatt 300
atatcaatag actatgaatg ctatttctag aaaaagtcta gtgccaaatt tgtcttatta 360
aataaaaaca atgtaggagc agctt 385

<210> 1220
<211> 351
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(351)
<223> n = A,T,C or G

<400> 1220
gaactgtgat ggcctagggg atgagataat gcagcaaaat aaaactgttc ttcctaccat 60
ttttgtgcag ttatttttg attttttgc tccattgtgt tgtgacagta tcttacctac 120
acttctgagc tctcctagag ctatttttat tcttggatag ctaattgtgt gtgtgtgtgt 180
gtgtgtgagt gnntnnnnnn nntnnnnttc nnntttntnn nttttttntt ccctntntct 240
tnttttttt gggggtttgg ttttttttgt gctggncctt ttgttctatt ggggtggtgg 300
gggtgtttcc ttgctgccct tgttgggggc ccctcatttg ttttttttta c 351

<210> 1221
<211> 341
<212> DNA
<213> Homo sapiens

<400> 1221
caaattattg atgccaggct gaaacttctc tttctttaaa taaagcactc ttgaatgtct 60
cctttatgtt ttgctttgtg atcatacttc agttaatttt tcaagaagaa aaaaaagaag 120
atgaagataa ggatgatact gaacattact aaatgattat aatctccccg ccattatgct 180
aatcactttg agctataatc tgttaatatc agggaatatt ttatttttta gagaatcagt 240
attttctcag tttcatagag atgcatatca attgagtgta tcactaggga agcggaacca 300
ctgagcaata caaatgagga atttatttta ggccgggcgc g 341

<210> 1222
<211> 345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(345)
<223> n = A,T,C or G

<400> 1222
accacatggc tgcctatgat acagagcctg cttttgataa tactactgta ctaatcatac 60
cactttagac ttcagaatga cacatgtgtc catagataat agctaggttg ggctgaggtg 120
ggattatcaa aggtccaatg tgaaacagca cggcacatag tattgcccgt tttaaacaaa 180
acaaaggctg agtgtatgag caatatatca tttaagacac ttctcaagct gcagtgttat 240
ggaaaatggc agagtgaaac cagcaatcca aagtaaaata taaacaacaa ataccttcca 300
aagactcttt aatatacaca taaaatttag acctactttg agccn 345

<210> 1223
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1223
atgctattca ggagaatcaa agtaaaccgg tgcaaagaag cgtttgacaa ttatgagcac 60
actttgttcc ttgggaaaac atacttggtt agttagaaaa aacaaattaa aagaagaatg 120
agctacatgt tgtactaata catttcattc ttcttaacac taatgcatac cttgaggtcc 180
ttagctgtag cccctacctt ccaggttttc atagagtgga gttgaatatc aacaaaatta 240
aataccaaca tttacataat acaagctatt taaacaatat cattgcattt atttggggct 300

tcaggtaaga ttaaattaat tgtttaaacc atgcactttt tgaaaaataa ttact 355

<210> 1224
<211> 383
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

<400> 1224
cgttgctgtc ggtcaggatg gtggattaac ctgtacccag aatacttatt gttcattttg 60
aaaagacttt gttcttttca tttttatttg ggagtctttg tgaccagaga agttagggag 120
gaggttattt ttgtgttttg gggttggctg gttggttggc tttgnnnncg gccctacatg 180
accgatgaac aaatggttcc agatggctct gtgtccatag gcagccttga atagggcttt 240
acacactctg agacaatgac agcctgtgtt gactgaaccc tgacttgtgt tcaaccctgc 300
catagtgcca gtgcctttgc atgaattcga taatttgagc ctagcactcg ccttaagagg 360
gtggctctgg tacctccccg ttg 383

<210> 1225
<211> 360
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(360)
<223> n = A,T,C or G

<400> 1225
aactaatttg tacagattta aactacaaac tcccttccac cgcttgtaca gtagctggta 60
tctttactca agtctcacag tttcagctgc tgatttattt tattttattt agcctggttc 120
cttggcattt gccataggct tgcataaaat agggtcggcc aaggatttga agagagtata 180
tacaatgatc cctcaatatc catgtggttt gattccagga cccctgagga tataaaaatc 240
cacatacggg cagtgtgtga tggctcacac ctgtaatccc agcactttgg gaggtcgagg 300
tgggtggatc acctgaggtc gggagttcgg ngccagcctg agcaacatgg agaaaccccg 360

<210> 1226
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1226
atatgttcat tgcaacacta ttcacaatag caaagccatg gaatcaaccc aaatgcccat 60
cagtgacaga ctggataaag aaaatgtggt acatatacac catggaatac tataaagtcc 120
attttaacta gacatccctg ctgaaatccg ttcctcctgc cactgtctac ctattgcaga 180
tctgcaaatc tccaggtcta tgaaactcaa tctttcaaac agtaacctgg tctaagcttt 240
attctcctat tacataaagc cacaaaggtt atgtccattt tgcataagaa gaagctgagg 300
cctgaaaggc tgacttgcct atagtgtgtc ccaagttagc ggtggaagct cgg 353

<210> 1227
<211> 309
<212> DNA
<213> Homo sapiens

<400> 1227
ctaccatttt aaattaattt agcattggtc tgttacaaag tgcatataat ttagattcag 60
aagaattggg cttcagttat acttttgtca ctttctcaat atgtaaccta ggataaatcg 120
ctccctcttt ttcaaatttg atgtgtacaa atgtaatatg aagtacttgg caacgtcagg 180
aacatttgat aaggcaaggt atataaagat atgtgtgtag ccaggcacgg tggctcatgt 240
ctgcaatccc agcccttggg gaggccgagg cgggtggatc acctgaggtc aggagttcaa 300
gacctggcg 309

<210> 1228
<211> 344
<212> DNA
<213> Homo sapiens

<400> 1228
aaacaagaag aaataactgt tatcagaatc tggagagaaa gttgtatggg gagggctacc 60
tgacaggagc tgtgactttt agtagagggg atgcagttag ccatggatta ccctgaggtg 120
aatgaaccag gctaataaat ataccagcaa cctccctcca ccatcaacta gggtgattct 180
ataatttatt gtccaaagtg ggacaaccac tatgggcaat ttagtcatat ctattaaagt 240
tgaaattgtg catacataga attacactta cttattctgg agacactctc tcatacaggt 300
tgcaaggaga catgcaaaag aatgttcaac agctacaaga actg 344

<210> 1229
<211> 339
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(339)
<223> n = A,T,C or G

<400> 1229
cttcctcttt catatgcaac caattccaga ataaagagaa ttctgaggtc ttagagaata 60
gaagagccac ctaaatgcct gcaccgatat gcatcagact gttaggtaag cgcacacaca 120
cacacacaca cacacactca cacacacaca aagacgaaga agattatgtt aaacttctaa 180
aactctgcag ttttatttaa ctaagtaacc attaaactaa ttaaccagct gcctaataca 240
gacattggaa tatggagtga gaggctgctt gaatataact aaaatatgtg ggtgcttagc 300
gattatcanc acgctagaat tctagggatt catattatg 339

<210> 1230
<211> 340
<212> DNA
<213> Homo sapiens

<400> 1230
catttccact ctttttggcc tttaatcact catgatagcc ctttaatgtg tcccttagac 60
tctatgatat ttgatagtaa aagaggtatt gaaagcatat tttctggtcc tcctgctttc 120
agattcttcc ttctgtccct actttctgaga tggagactga gtagggagtc accaaactga 180
tctggagaag atgaactaga tatgctcaga ttatggaccc tggcctcagt ggggagaaac 240
tggaattcta acccaccagt ccaactgtca tatccaattt taaactctgg ctgcgaacca 300
tggctcacac ctgtaatccc agcattttgg aaggccaggg 340

<210> 1231
<211> 340
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(340)
<223> n = A,T,C or G

<400> 1231
agggagaagt ctagctcctg accaggctct gatttccccg gccctgccct attcaagttc 60
ctcaaattcc ttgaccccaa cccttgcccc ataagaaacc tccccatgac cctgaccctg 120
acagagaact ggctgtgaaa atttttgcat tgacaacaga tattggaatg cagggattcc 180
ctatctactt caggcacctt caagaatcag aggaggccaa gcatgatggc tcatgcctgt 240
agtcccagca ctttgggagg ccagggtggg gagatcactt gaggccagga tttgagacca 300
gcctggccaa tatggcaaaa ccccgtctct actaaaaatn 340

<210> 1232
<211> 336
<212> DNA
<213> Homo sapiens

<400> 1232
aactagatgg agtcctggcg ctcactgtga ttgagaacac atgacaaact aataggttta 60
ctgggcaggc ggctaagctg atctacttgc tggttcaatt agctccactt tccggaggct 120
agcattttcc caaccttgcc ccatgctctt gtgggtacat ttaccctatt tggggcctta 180
gcgctttaca aatgaacgtt tcagtttaag agacattgcc acataactta tattaagtgg 240
tatgaattca aaagcaagct ctgccactac acatcagaat ccagcactga aggaagtgtg 300
gaagtcagaa agatggacag gaagatccct tcaagc 336

<210> 1233
<211> 383
<212> DNA
<213> Homo sapiens

<400> 1233
cttagtggct tttatccccc cggcatgcta ttttgctgat gtttctataa ttgcctcaga 60
ctttcacatt tactagtagg gctgagagag gctttagtga ggaaagaata ttcagaataa 120
aacggttgag aaagctgaga agaccattga gttttgatca gttgtgaata gagtgcaaag 180
ccatggccaa gctgtttttg gaaacgctgg ccggcgtgtc ttcagtggaa aaagcaaatc 240
aaaatggagc gagagcaaag gggcgtcctc agtcctcaac ctacaatcac tgtatggaat 300
cggtcctggc agctgaacat aggaggtcac tggaacaagt gatagtgcag attggctttc 360
aaacatcctc ctggcttgag ttt 383

<210> 1234
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1234
gtattgactg aactaccaga tattgaggct tctttgctta ttagctgcat gactttgggc 60
aagtcaagtt ccacctgagc cttgcaagtc aggcctgggg agtccaacca cccagaacct 120
ttgagtctct gttagagagc aagaccctct cttaagaaac aaaaataaaa caaaaaaaga 180
gtattgggat atggggagtt tggctcctgt agaaagggta gtctgggagg cctgttacag 240
gagttaacat tggacctgag acctgaggat gaacagaagc catcctgaaa gaactgggaa 300
aataaagagg tggccaggcg tggtggcgca cgcctgtaat cccatcactt tgg 353

<210> 1235
<211> 243
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(243)
<223> n = A,T,C or G

<400> 1235
catagtcaag ataggctaaa ttatgctgag ataacaaaca aataaaaact ccaaaatctt 60
aatgccttta ataacaaaga tgtatttcct aatagtgcta catgtccctc tcagatcagc 120
aaagagatct ctgctcattg tatttaataa gaggcccagg ctgacaaagc tgctgccatc 180
ttgaatatag ctccttgatg tgccagacag aataaagaac tctgcaggat cacccattag 240
can 243

<210> 1236
<211> 342
<212> DNA
<213> Homo sapiens

<400> 1236
atgctaactg agttaattag atgagattct gtagagaaaa tggacactat aagaaataat 60
agtgtccaga actgagttat aatgacctct aatatttaat gataaatgaa agaagaggaa 120
ctgatgactg aatctgagaa gaaaccaata aacttgtaat aacagaagaa caaacccagg 180
tggtgctaaa gaaatcacag ttcatcaaaa aggagggaca agtggacttg ccttgttaaa 240
gatggactgc cttaccaaat atgacaaata ttaaaatatg tttagatttc aatgatgacc 300
aaatatgtaa ataagacact ggaatttatt cgtcaaattc ct 342

<210> 1237
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1237
tttcaatctt tcgtcccaaa tgccatattc actacaagga acaggggttc cttggagaaa 60
tggctgaata taagtgtggg taaggaaata tacaaatgaa cctggaatat cttattatat 120
atatattaaa aaaaatctac tagattcacg tcaaaagtag ccagagacca acttgaagtt 180
tgttatttga gcaccaatgg ggatatgaac tggaacccac aggttcatat tgacaggagt 240
taaaaaaaat actttggtca gctttgaatg atgttccatt agcaagatta accaagaaaa 300
gggagaaaaa atctaaataa cctcactaag aaatgaaatg agagctatta caact 355

<210> 1238
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1238
cagggaaatt tgataagtta atcattattt cagccaacaa atctgaggcg gttaaaatac 60
ttttccttcc atatttgatt tataagcatc ttccccttga tgtgatttat cttttctaaa 120
gggactagat cattctaagc agaggaacaa tcatagcgaa ctgtgcctca ggctatttgc 180
agacgatgtc acttgagttt aaaccacaaa gacatttcag aaagaaaaca tttctatctc 240
ttaatatgta agccaagaga tatgaaatca tggcatcccc agagaaacac ctttccctga 300
tgtcaacttg gcgacttgca tctgcttttc tgatgaacaa agaaaagtat ttggctatgg 360

<210> 1239
<211> 380
<212> DNA
<213> Homo sapiens

<400> 1239
cgttgctgtc gattaattta acaaatttat ttagtgttgt ctcagacact tgagacactg 60
gagagttgga ggtggatgaa aggagaacct tattctttag ttgtttacac agcagagtaa 120
atatcacaaa ggcaggtacc ttgtcccttt tgtcaactac tgtgtctgca gcatctagca 180
ccatgtctgc catacagtag gtgtttgttt aatttttaa atgaatgtaa agtacaggta 240
agtatagttt tacatatatt atcttccaat tatttggatt cctcatttca tttctctcct 300
catagtgtgg gaagaggaaa gatttgagat gaaatggaga aacatcaaga tgaaatgcag 360
agtatttaga caagattatc 380

<210> 1240
<211> 337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(337)
<223> n = A,T,C or G

<400> 1240
ggtttcacca tgttgaccag gctggtctca aactcctgac cttaagtgat ccacccgcct 60
cggcctccca aagtgccggg attacagacg tgagccaccg tgcctggcca acatttattt 120
agttgaattc ttaaaattta tttttctaat agaataaggg agagcattag aagtagtttt 180
cataagacac aataaatata aacctgtcat ttacctgtct agccctgata ttctgaaatc 240
tggaacttgg gtttagaaca aaatggattc agttaatcct ttttttttt taaagagaga 300
gatttgtatg aggctggctg ggttattcat tcattcn 337

<210> 1241
<211> 367
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(367)
<223> n = A,T,C or G

<400> 1241
tctacggctg ctataatacg acagaaggga attcaaggag ccggtcacca caagctgcat 60
aaacaaatcg ttaccagcat aaacagaata tatagcagaa tttattcttc gaaaaaaata 120
cttactgata ttcaggccag gcacagtggc tcctgactgt aatcccagca atttgggagg 180
ccgaggcggg tggatcacct gaggtcagga gttcaagacc agcctggcta acatggcaaa 240
atcctgtctc tactaaaaat acaaaaatta accgagtgtg gtggtgggtg cctgtaatcc 300
cagctacttg ggaggctgag gcaggagaat cgcttgaact cgggggcgg cggttgcagt 360
gagccan 367

<210> 1242
<211> 359
<212> DNA
<213> Homo sapiens

<400> 1242
tgggtttgtc agtttcaata ggagattcta tgtatttagt ctccaaagaa cccagaatta 60
tctgtgggga gttttgaagg agtgagccat ttgtaaaaaa cataatatgt agggcatggc 120
aaacaggaag aaaaagcaaa aaggagcatt agagtgacaa aaggacaaac ccaaaacagg 180
atttacatgg aaacccatgc cagcaacctg catcagagaa atgtatctgc agccagcagt 240
atctctgctg ccatacagag gtctagaaat tttgaaagtt tataaggcaa aaagagaaaa 300

gacaaatacc aagcaaggaa tcacagatgg aacaatcaga aggattacta aaacaagaa 359

<210> 1243
<211> 287
<212> DNA
<213> Homo sapiens

<400> 1243
ggaccctgcc cctcacccta cacaggctat aggatctgga agggaaggga cggttcctgt 60
taatatcttt gcatcttaag gacacagccc acagggtctg ttgggtgact gactgattga 120
atgagcaaga cttctagtta tacatagact gaaaacttcc acttatctct gcttcttttc 180
aaaatcccac taaaatatga ataaatgcat gttttaaaga caaaaggagg ccgggcgcag 240
tggctaacac ctgtaatccc agcgctttgt gaggccgagg cgggcgg 287

<210> 1244
<211> 245
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(245)
<223> n = A,T,C or G

<400> 1244
ggcagccttt tcatagatat actttaaata ccctttgaat aaattcattc agcaatagag 60
ttattgagta ttgtgcagag gtatagggtg atataattgt gactaggtga ctactttaca 120
ttagatagtc ttctctgatg ttaacattta aatttaggac ctcggctggg tgcggtggct 180
cacgcctgta atctcagcac tttgggaggc cgaggagggt ggatcacctg aggtcgagag 240
ttcan 245

<210> 1245
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1245
cgttgctgtc ggccaaatac tgtgcttagg gctctgtcca gatcattcca gttaatccgc 60
ccaagacccc aacagcacag gtgttgctat atttttgtgg tgaggaactg agacccaggg 120
aagtcacggt actttgccca aagtcacccc gatgtcaagc gttagagcaa gaatttgaac 180
cccagagctt aactcttaac catttttgcta actggctgtc tctccaggcc cccatcaccc 240
tttccatcac cctcccctgc cccaggggca ttctatcaga tggcaggtcc cccctcgctt 300
ggctcagcat ctccaattta aagcttcatg gatctccctc ctgttgaagg catgggaagg 360
atttcccatc tcagaaactg gacaag 386

<210> 1246
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1246
cttgtctctt tttctccttt tgtgaaccag agattgaata ctaggatagt caaaagcaac 60
tacatataca agaaaaattt gaaagtcatt gtgcatgccc agggaaaggc acaggctcag 120
aaaagacctg agaagacctt aagtttacag ttcagcctaa tcttcagaaa agaggcagcc 180
tacaacaact acaaacaaat aaacaacagc aacaacaaca aagcaaacag caagcactga 240
ggaatgggag gaaatctgat ttccagagat acaacactat taggttcaga agctcaattt 300
aaaaccaaat atcacaagga gcacaaagga acagaaaa 338

<210> 1247
<211> 376
<212> DNA
<213> Homo sapiens

<400> 1247
cgttgctgtc gggaaaaatg tggggtgtac caggggaaga ctcggagtgc gatggcggcg 60
caaattccaa ttgtggccac cacttccact cccggaatag tccggaacag caagaagagg 120
ccggccagcc cttcccacaa tggcagcagc ggcgggggct atggcgccag taagaagaaa 180
aaagcgtccg cttccagctt tgcgcagggt atcagcatgg aagccatgag tgagaataaa 240
atggtgccct ctgagtttag cacaggacct gtggaaaaag ctgccaaacc tttgccattt 300
aaggatccca actttgtgca ctctggccac ggtggcgcag tagctggcaa gaagaacaga 360
acctggaaga acctgg 376

<210> 1248
<211> 339
<212> DNA
<213> Homo sapiens

<400> 1248
caaatactta ctgaccactg catggcaggc tctatgctga gcactgtgaa tacagaagtg 60
catcttgata tggggattcg aactgcatgg agctcacacc gtccaaccca gattgacgta 120
cataataggt ccttgactaa aaaaatctca gaggctgcca ggcctagtgg ctcacaccta 180
taatcccagc actttgggag gccgaggcag gcagatcacc tgaggtcggg agttctagac 240
cagtctgacc accatggaga aacctcatct ctactagaaa tacaaaatta actgcgtgtg 300
gtggcgcatg cctgtagccc agctactcgg gaggctgtg 339

<210> 1249
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1249
cccgcaggtg gaggagacaa ggtctttact gttcacccag gggctaggcc tcttccactg 60
gctccctgaa tccccatgct ggccaccaag ggaaggagct atttctgcag ctggacaaat 120
gaggaaacag aggcacaaag cattctagca tttgctcaag tggcacagca gtaggaactc 180
tttccctggg ggccggccca ggagtatttt gtcccatgga gaactggaac agcatcagga 240
cagtgagcca gcaggcagca ctggcaggtg tacatttaga agactgactg ttgcccggcg 300
tggttgctca cgcctgtaat cccagcactt tgggagg 337

<210> 1250
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1250
atcagatagg gtcgagaaca actgatccag acatatatac cgaagtgttc atgaaataaa 60
gcgtagaagt tagtgcacga atttgttctg ggcgtttgtt ttagtattcc agcattttgt 120
ttctattgct aactgatgag aaatgcttta aacacataaa catgttctga tgtgtatgtg 180
tgagacttgc gtttcccaac gttgcataaa ataagcacaa ataagtgtaa aatagtgtaa 240
aataactgca aatagcttta tcttacacag aaagacaggt gaacagctcg tctttaatct 300
taagcataac atttgttttg gtaatcttat aaagattgct tcttgcacat tttta 355

<210> 1251
<211> 268
<212> DNA

<213> Homo sapiens

<400> 1251
aaaacaaaaa aaaaaaaaaa aaaaaggggg ggggtttttt tctggaaccc ccaccgataa 60
aaaacttttt ggggggtggg acaacccccc ctttaaaggg ggggaaaaaa ggggctttt 120
ttgaaaaatg gggacgtttt ttgttttttt ggcacccttt aaagccccca taaactgggt 180
aaaccccccg cctgggcttt ttttttttt tcacgttcca ggggaggggg ggggagtttt 240
gctccctcca gcagcccctt ttttcctg 268

<210> 1252
<211> 291
<212> DNA
<213> Homo sapiens

<400> 1252
aaaaaaagct taatagtcat aatatatatg ggatttttac caaagaaaaa caccaaaata 60
gaaacatgta taaaggaaat taaaaggaaa tcaccaaaga caaaataaga aacccctcac 120
aaaacagcac attaaaatga gacatttttg ggttgggcgt ggtggctcac gcctgaaatc 180
ccagcacttt ggcaggccga agtggctaga tcccttgagg ccaggtgttt ggcacgagcc 240
tggccaatat ggcgaaaccc ctctttacta gaactaccga tattacccag g 291

<210> 1253
<211> 342
<212> DNA
<213> Homo sapiens

<400> 1253
tgcatctctt gttatcttct gtgaagtgag tcagtttcaa ctttgccttt gtgcttatgt 60
gtcattctct gctctttgat gttcaagtct atattggttc cagactctgt tttatttaat 120
ctgtttgttt tctttctaaa aacatattct atattcccgt tcaagagtgg agctaacttc 180
acaggatttg ggaaaattct gattattcta gcccatacac agaatgccca ggacaaggaa 240
gacaccactt ctctgaggaa ttgtgccaag aatacaagtc ggtgaagtca gcatgcacat 300
gttgaatgtt tacaatgtgc caggtacttt catatactat tc 342

<210> 1254
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(386)
<223> n = A,T,C or G

<400> 1254
cgttgctgtc ggggggatgc acaggacact ctgtgcctca gttttcttat ctgtaaaatg 60
gggcaaatac ctaccaagtc atagggttga tgtaaagtct agttgagata atggagggta 120
atttcttttt tttcttaagc ttaaattttg gatccatttt gtgttgattt ttgtatattg 180
ggtggtaatt tcttagaagc tagaaagtta ttaaatgctg cttatgagcc aaatactgtg 240
ccaagggctc tgtccagatc attccagtta atccacccaa gaccccaaca gcacaggtgt 300
tgctatattt ttgtggtgag gaactgagac ccagggaagt cacggtactt tgcccaaagt 360
caccccgatg tcaagcgtta gagcan 386

<210> 1255
<211> 382
<212> DNA
<213> Homo sapiens

<400> 1255
tacggttgcg agaatacgac agaaggggcg tgagctactt ttttttaaa cagataatca 60
acagggccaa agcaattaag tcattttccc agtcacttgg ccaataagca gcaagtcaat 120
gaccagaaca aattatacaa ctttcatctt cccataactg atctaagcct accaaaaaaa 180
cggatgagac tagacagaag aaacagtgtc accttcatcc ccggtcatct agtcaagaac 240
tacgcaaaag ccatatgtaa cagaaatcta ggaccacagg ctacagtgcc atggcacaaa 300
catggctcaa tgcagcctca acagcttggg ctcaagcaat tctcccacct cagcctccag 360
agtagctggg gctacaggca ta 382

<210> 1256
<211> 343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(343)
<223> n = A,T,C or G

<400> 1256
gataggcctg aagaacacag ggcgctgcat ttàgaaagga ggcggggtca gaggaataga 60
aagggatagg gctgaagaac agaggtcgct gcatttagaa aggaggcggg gtcagaggaa 120
tagaaaggga cagggctgaa gaacacaggt cgctgcattt ataaaggagg cggggtcaga 180
ggaatagata gggacagggc tgaagaacag aggtcgctgc atttacaaag gaggcggggt 240
cagaggaata gaaagggaca gggctgaaga acacaggtcg ctgcatttag aaaggaggcg 300
ctgtcagagg aatagaacgg gatacggctg aagaacacag gtn 343

<210> 1257
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1257
gtcggttgtg acagtgaaaa atatcttcag acattgccaa atgttccctg ggaggcaata 60
tcacccttcc ttttctgcca ggtagttcta tgaatttctc acagcagaat ttctctttcc 120
atattcctat gggcattaga gaggtagaac atcagcattt accagacata tttgatacta 180
agtccctatt tgttaagtca gagaagtctg aggttataaa atcattccct tcctcctcaa 240
agagaagtga aatccttata ttgtagagat caccaagttt tcatagtcag acatttccac 300
tttgtctggg tttttaaaaa acctatcaga gaaaacta 338

<210> 1258
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1258
gacctgggag aagctgacaa tgaaaatgat cggctttttt ttttttttg gagtggggcc 60
ctctttttc cccccggtct gtatttccca cattgcatat tgaagtaaaa tgctcctgtc 120
cctggtgctt actagtgtag tgatcatacc ccggcatcct gcttggggaa caaaacatcc 180
caatacctgc ctagggcaaa tttggcaaac cctaaaaaat atgagcccac cgcatttaca 240
gattccttac cacgaaaagg aaactccgca ttttgtgacc atttaaaaat tggggctata 300
gctaccccaa cagcccg 317

<210> 1259
<211> 338
<212> DNA

<213> Homo sapiens

<400> 1259
catcatatac tcatggcact aaaccacagg aaattctaaa atttctagca gtatttctgg 60
taatctaaat aatatatata aaagtgtgtg tgcgcgtgtg tgtaggtcct ttgttaaacc 120
cttgtacatt tatgattcgg ggcggaagaa ttctttgctt tagaaactat cttggttcta 180
taatttttaa aaaaatcctg tctttttttt gtttaaaagg caatacttat tcatttttt 240
aaaaaacagt gacagtaaaa agttaaaaaa taagctaagt agggactaag gaaagagtaa 300
aagtcaaggg tatctatact gattaaagaa tttttagg 338

<210> 1260
<211> 341
<212> DNA
<213> Homo sapiens

<400> 1260
gtgcggctat ggagacccag gggcagccca agtccttttg aaccaagcag ggaggggttt 60
tcagggtctt tccagtgacc caagggagga agggctgcgc tgagatgtgc cactttcagg 120
cagagagaga gagaaagatc tgggggtgag gggtactaga cctctggatc gggtgtcatc 180
ggctcgctcc ttggcatagt ttcagacccg attttctggc tgactttcag aactacagta 240
ttgctcaaac tctgctgtgc tcagagcctc gtaggagaac tggtgagaat gcagatgccc 300
aggccctaac cctggagatt ctaattcaca aggctaggga g 341

<210> 1261
<211> 349
<212> DNA
<213> Homo sapiens

<400> 1261
acgacagaag gggtgttggt ttgttccaca tttaggatca ttttcccagg ctagattttc 60
agatgtggga ttatgggttc agatatggtt tacacatttt tatagttctt aatacagatg 120
gccaaattgc tttctgaaag agaatctttt cttaagtatt tttctccaac ttgtatctta 180
aacatcctga acatgcttag caccactgtc ttgatatatc tgcggaaagc cacgtctgca 240
ctttttagtg ttgtgggccc tgggataggc aggcattctg tgcttgctct ttgtagctgg 300
acgtaaaatt tctttttctt gctgggcgcg tgggtttttt cccgaaatg 349

<210> 1262
<211> 383
<212> DNA
<213> Homo sapiens

<400> 1262
tacggttgga gttgacgaca gaagggaaca cattaaaagc cagagttcag ggatatcaga 60
gctagatata aaatgttacc cttcaaatgc agagagcctt gaggttatgt gtggaatacc 120
cacgaggagg aagtccttaa tcagttatct tgcaaagact cagcagaacc tgggcataaa 180
cccagacttg agcaaacact aagacaatgg ctcctgcaag aactgtctcc tctcaatatt 240
tggagtatgt cagatacagc agtgcctttc agaatgtgcc taacatccct aaagaatttg 300
aatatgccac tctttttttc tgatttaaaa ttttcttact gttgcagagt attaatttaa 360
aaagatgttt aagactgttc atg 383

<210> 1263
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1263
gaggtttcat ttgtggcgag attctctccc aggccacaag acatttcctg ctcggaacct 60

tgtttactaa ttgtaagtac tttacaagta agaacttgtt ttaaaaactt agcattcaaa 120
aaaaaagctt tctttaaaag atattcgatt ttcttggttt ttttcttagc atgttatatt 180
ttgaggttca gctaaaagac taaggttttc ttatctaatt gctttaaatt tatacattta 240
gtcaaattca acaatttctt gctaagcatt ttgccagatg ccaggctttt caaagtagtg 300
taagatccca gccttgaatc ctcatcaatt gctgctttct gctgcaacac ata 353

<210> 1264
<211> 342
<212> DNA
<213> Homo sapiens

<400> 1264
gataggggag agacagaagg gaggaaaaga tttttcttaa ggagagcaag aatcaatact 60
atgaaagtca atttccttat tcaaattcaa agagaaattt tgtaaccaaa aatgggagaa 120
ctactgaaaa gtcagaagta aacagaagac tggagtagac agtgaggagc aaagataaaa 180
ggagagagaa gattcaagac agtccccccа tttttattgg tctttagctg tgcctattgt 240
gagtgggtag atttgtttaa aggctcaggg tctggccggg cgcggtggct cacgcctgta 300
atcccagcac tttgggaggc cgaggcaggt ggatcacgag gt 342

<210> 1265
<211> 374
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(374)
<223> n = A,T,C or G

<400> 1265
cgttgctgtc gcacgaagcc ttggaaagca tactttcacc ccaggaaacc ttaaaagaga 60
gagatgaaaa tctcctcaag tctggttaca ttgaaagtgt ccagcatatt ctgaaagatg 120
tcagtggagt gcgagctctt gaaagtgctg ttcaacatga aaccttaaac tatataggtc 180
tgctggactg tgtggctgag tatcagggca agctctgtgt gattgattgg aagacatcag 240
agaaaccaaa gccttttatt caaagtacat ttgacaaccc actgcaagtt gtggcataca 300
tgggtgccat gaaccatgat accaactaca gctttcaggt tcaatgtggc ttaattgtgg 360
tggcctacaa agan 374

<210> 1266
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1266
aagactccat ctcaaaaaaa aaaggaagga aaaggaaaga aaaaaccctt ggaaaagtag 60
gggattttga aaaaaatttc cccattttca ttaaagagat ggacatataa ttttaaaaaa 120
ttcaaatacc ctatgtaaaa tgctatgtaa aacacccttt gcaaaaaccc aaagtattca 180
aatttttgag ggtcatggca aaaaaaaaaa atattaaggg cagttaacga caggggcag 240
gccacataag ggggaaacta cttcaaactc acaggggaac tctcagcaat atcccacagt 300
caaaagactt taaaaaccca tattcagcat ttttg 335

<210> 1267
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1267

ctttgtttta gaacgtattt gctcttccct agaaacagac tcagaaaaaa aagaactatt 60
ttctctaaaa tttaaaaaaa tattttctca aaagtgaaac ttggatatgt aaggtttttt 120
gctaaagctt tgctaacatt agtaatagca atgaatagga attaatgaca ttagaaatag 180
taataccaaa taactgtgac tagtgcaact tcaaaataaa tttcattctc ccacaaagct 240
cacaaattgc tctttgctta aagatcttct tttgttgtgt ttaacttttc tagagcattg 300
tatatcttgc ctaaaataaa tccaattacg ttaacaacat ttaataaaca ttttcctccg 360

<210> 1268
<211> 358
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(358)
<223> n = A,T,C or G

<400> 1268
ggacatgaag aaagagcttc ctgcaattca aggactgtac aaagctgaaa cgcagagatt 60
ttcatattat ttgggagact cagaaatgag cttttaagga tgttccttga cttgcgggtc 120
aataagcgca caatggtgaa gaaaaggctg ccttctaatg acacggtgtt ccggtttgag 180
actccgggca gcccaaggaa ggccaacgtg gaggcctcac gcagctccac agacagcccc 240
agctcggtgt tcctcagctc agaggctgag aatggtgtgg aggagagana gaaagcctag 300
cggtcgtcct catctgcata ccatagccca tttgtgtagg cggagtctcc agaccaga 358

<210> 1269
<211> 344
<212> DNA
<213> Homo sapiens

<400> 1269
tatctcagag agtactggga ttctgaaagt gaaagggtta tacccagtta aagtatggga 60
gtgctggacc aagctaacat gttcaagaag aaatatggga tatatttatg gaaatagata 120
atgaaaatgc tgaattgaag agcaaagatt ggacaatgga gaatgtttca gtttatcaat 180
attggtgcac tcttccatgt aggatgattt aactctgtga tatgtaccct ggaagattga 240
agaaatatta cgactatgta ggatcttggg cactagaagc ttgctgaaag cggattccac 300
tttaagcttt gtagaaatgc taagaggtgg ccggtcgcgg tggc 344

<210> 1270
<211> 346
<212> DNA
<213> Homo sapiens

<400> 1270
atcttgggga aggttaaaga cacctggaga atgaaatctt ggattttact ttcctgaaag 60
gctgaggcta ggcataattc tctgcctttg ttcccctcct ttgtcttggt taaatgttcc 120
tggccatact gtacctgtgg ttttattgtc gtcctttttg ggaacaagca ggatataaat 180
cagtcagtga aattttagaa tgtagctctt tggtctagca tctaagtaga taaagaagaa 240
atgggcactt aataagtgcc tctggaggct tgtgatttgc atggggctcc caatgaaagg 300
taaagtcttt gcttagaggt tacacacacc gaatgcaggg tggtcc 346

<210> 1271
<211> 350
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(350)
<223> n = A,T,C or G

<400> 1271
gaagaaagag cttcctgcaa ttcaaggact gtacaaagct gaaacgcana gattttcata 60
ttatttggga gactcagaaa tgagctttta aggttgttcc ttgacttgcg ggtcaataag 120
cgcacaatgg tgaagaaaag gctgccttct agtgacacgg tgttccggtt tgagactccg 180
ggcagcccaa ggaaggccaa cgtggaggcc tcacgcagct ccacagacag ccccagctcg 240
gtggtcctca gctcagaggc tgagaatggt gtggaggaga aaaagaaagc ctgcaggtcg 300
ccaacagccc aatcccctac cccatctgcg gaggcggact ccccagaccn 350

<210> 1272
<211> 325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(325)
<223> n = A,T,C or G

<400> 1272
ctgagaacag agaggggatg gagcatgaca attagtgttc attgacattg ttgttggagg 60
tccctaggta gggccagact gcaggcagcc agagagatgg cccaggccta gggagggttg 120
aggacgggga caggtgcagg gccagcatcc ccaccactgc ctggcagctc cccagtaatg 180
cagatgctgg gtggcttcct ggagagggca caatcctggg ggaggtgttg ggaggttanc 240
cncnnntcnt tnnnnntaag gcccacnaag tttcaggccg cgtggccaga ggaatgagct 300
gagcatttgt tgtgctgcat gtaga 325

<210> 1273
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1273
cgttgctgtc gccagagctt aactcttaac cattttgcta actggctgtc tctccaggcc 60
cccatcaccc tttccatcac cctcccctgc cccaggggca tcctatcaaa tggcagttcc 120
cccctcgctt gcctcagcat ctccaattta gagcttcatg gatctcctcc tgttgaagtc 180
atgggatgga tttcccatct cagaaactgc acaagaaaca accttggagt tttgaacaaa 240
ggatattcaa ggagtattca agaatgaatc ttcataatcg tggtcatgag acatgagaaa 300
aaaggtgtct accacgtctt gtctctactc ataaagaaca ttggccaggt gcggtggctc 360
acgcctgtaa tcccagcact ttgaga 386

<210> 1274
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1274
cggggctaga gaagaacaaa ctagattctt gcaggcattc caaggaggct catcttgaag 60
cccaacctga ccgaatgcac cagtagactc ggccaagccc ttccttatgg ccccaggaaa 120
ctcccaagct atggcaccac aggaagccta tccaagctga ggacccaaga caagttaaaa 180
acaggttcaa cggaaaaggc tgagaatcac tggcccattc tgtacccatg cctttaaaaa 240
taatacccag ctgcgcacgg tggctcacgc ctgtaatcct aacactttgg gaggtcaagg 300
caggtggatt acttgaggtc aggagatcga gaccagcctg gccaacatgg g 351

<210> 1275
<211> 359
<212> DNA
<213> Homo sapiens

<400> 1275
gatattgagg cacagagagg ttaaataaat catccagagt ctagaaagtg acagaactgt 60
atttcaaacc agtatcttct tgatttctaa aagtctttac ttttttttat tttttttgt 120
ggaaaaaggg ttcgactttg tttccccggc tgaagagctg ggctgcacca ctacactaat 180
gttacctcta cctcgcggtg ggaggtgtct gtttggctca catccctgag tgacttggat 240
agcagtatgc tcacctccgc cttcgcctca tttggtgatt ggatcaacca cggttttatt 300
gtcagattgc ccactggggg gctatgcttc tacttcccta cagtctcttt aatcagtgg 359

<210> 1276
<211> 201
<212> DNA
<213> Homo sapiens

<400> 1276
tagcctggct taatccacgt attgacttga acccggcacc tctgcatgct gggcacacac 60
acatccacac aggtgagcac agtcgtgtgc acctgcacgt tacacaggtg aacttttctc 120
atccaggcct gaggtttcca ctgcatctca aacacttagc cgaggtgtgt caggaccagc 180
aatgttgtct ttgcggccct t 201

<210> 1277
<211> 340
<212> DNA
<213> Homo sapiens

<400> 1277
gacttccggt cggcgtgagc gtgaggtgtg ggtgttcgtt tctcaggtaa aacatggcta 60
aaagcttacg gagtaagtgg aaaagaaaga tgcgtgctga aaagagaaaa aagaatgccc 120
caaaggaggc cagcaggctt aaaagtattc tcaaactaga cggtgatgtt ttaatgaaag 180
atgttcaaga gatagcaact gtggtggtac ccaaacccaa acattgccaa gagaaaatgc 240
aatgtgaggt aaaagatgaa aaagatgaca tgaaaatgga gactgatatt aagagaaaca 300
aaaagactct tctagaccag catggacagt acccaatatg 340

<210> 1278
<211> 352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(352)
<223> n = A,T,C or G

<400> 1278
gacttccggt cggcgtgagc gtgaggtgtg ggtgttcgtt tctcaggtaa aacatggcta 60
aaagcttacg gagtaagtgg aaaagaaaga tgcgtgctga aaagagaaaa aagaatgccc 120
caaaggaggc cagcaggctt aaaagtattc tcaaactaga cggtgatgtt ttaatgaaag 180
atgttcaaga gatagcaact gtggtggtac ccaaacccaa acattgccaa gagaaaatgc 240
aatgtgaggt aaaagatgaa aaagatgaca tgaaaatgga gactgatatt aagagaaaca 300
aaaagactct tctagaccag catggacagt acccaatatg gatgaaccaa an 352

<210> 1279
<211> 386

<212> DNA
<213> Homo sapiens

<400> 1279
cgttgctgtc ggctgggaga cacgagggtc acaggcatgg agaatggaga tggaggggga 60
gcccggtccg tgggccccaa gagccgagcc ggacgaggga tggagtgggg agacgcagga 120
gggcggtgtc tagggctggg gaatggagtc gtgtctggca ccccggtggg gactgtattg 180
gaaggcagcc cagaatgggc agcggcgagg agtgaacacc tggctgcagg tgacggcctg 240
caggaaggag gcgaagatgg ccccagggaa ccaaagaggc tttgccgacc cccgggagag 300
ggagaggtgg actgggaacc cctggccaaa ttccgagcag cctgcgggcc agagctggca 360
gacctggtgg ctgaggagtt ggcctt 386

<210> 1280
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1280
gagcggagcc cggagcgtcg tggaaagcat tggacacatt tccaccatgc taatggcatt 60
ttaaatatat ttggcaattt tcccaatttt ttactgaaga aaactgtaag tttatacttg 120
aggactgaag tgtgactctg ccgattatca ggctttcaag atgaatctgg aaaaactcag 180
caagcctgaa ctcctgacac tatttagtat tcttgaagga aagcttgaag caagggacct 240
tgttatataa gcctttaaag cccaacacag atatactttc attgaagaac gctatggaaa 300
atataacatc agtgatcctt taatggttct acgagagatt ttgaacactg aagagaaaaa 360

<210> 1281
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1281
gggctcagag gagagaactc ccagagggtc tgggccctcc ccattcagag cattgagcca 60
gaccaggcct gtcgtggtca cctgcatgga atcttctccc tacttaggca ctgccaggcg 120
gaccatcttc tggatgagaa gggcagggca caatgtctcc tccagagaga gatggtacag 180
tctctggagc agcaggtaat gccagggcgg tggagggtaa gggataggga tagtgcgcaa 240
aaccttctgt ccaccatgtg ccagaaacca agttcacctg ggacgagggc tggtataaag 300
gaaagaagag gagcgggcac tcccagggaa gaccgtagcc tgggcaaaga tg 352

<210> 1282
<211> 345
<212> DNA
<213> Homo sapiens

<400> 1282
ggagcggagc ccggagcgtc gtggaaagca ttggacacat ttccaccatg ctaatggcat 60
tttaaatata tttggcaatt ttcccaattt tttactgaag aaaactgtaa gtttatactt 120
gaggactgaa gtgtgactct gccgattatc aggctttcaa gatgaatctg gaaaaactca 180
gcaagcctga actcctgaca ctatttagta ttcttgaagg agagcttgaa gcaagggacc 240
ttgttataga agccttaaag gcccaacaca gagatacttt cattgaagaa cgctatggaa 300
aatataacat cagtgatcct ttaatggctc tacagagaga ttttg 345

<210> 1283
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1283

ggagcggagc ccggagcgtc gtggaaagca ttggacacat ttccaccatg ctaatggcat 60
tttaaatata tttggcaatt ttcccaattt tttactgaag aaaactgtaa gtttatactt 120
gaggactgaa gtgtgactct gccgattatc aggctttcaa gatgaatctg gaaaaactca 180
gcaagcctga actcctgaca ctatttagta ttcttgaagg agagcttgaa gcaagggacc 240
ttgttataga agccttaaag gcccaacaca gagatacttt cattgaagaa cgctatggaa 300
aatataacat cagtgatcct ttaatggctc tacagagaga ttttgaaaca ctgaaggaag 360

<210> 1284
<211> 361
<212> DNA
<213> Homo sapiens

<400> 1284
cggggacgag ctggaggacc cctatcctag acagatgagc ttcttctgat atacacggga 60
ctcgggggac gctaacgacc taggagtatc caaccagcac cgtaacacac agaaccactt 120
caactcctgc tttctctcca tgtgtacaca atgtgacagg gacggggtag ataagacatc 180
tccttcaggt gaaacagcta cctcatccct ctgtagtgtc acaaacacat ccatgatgac 240
atcagagaag ataacagtga caacctccac aggctccact cttggaaacc caggggagac 300
atcatcagta cctgttactg gaagtcttat gccagtcacc tcagcagcct tagtaacagt 360
t 361

<210> 1285
<211> 379
<212> DNA
<213> Homo sapiens

<400> 1285
ttcgcggccg caaattcttc ttcttccgct gtccctcctc cccacccctg cagtttgcac 60
tctataagaa gatgacccag gcggccatcc tgatccagag caagttccga agctactatg 120
aacagaagcg atttcagcag agccgccgag cggctgtgct catccagcag cactaccgct 180
cctaccgccg caggcccggc cctccccacc ggacttcggc caccctgcct gcccgcaaca 240
aaggctcctt tctcaccaag aagcaggacc aggcagcccg gaagatcatg agattcctgc 300
ggcgctgccg acacaggatg agggaactga agcagaacca ggagctggaa gggcttcccc 360
agccgggact ggccacatg 379

<210> 1286
<211> 384
<212> DNA
<213> Homo sapiens

<400> 1286
ttcgcggccg caaattcttc ttcagcccct gtccctcctc cccacccctg cagtttgcac 60
tctataagaa gatgacccag gcggccatcc tgatccagag caagttccga agctactatg 120
aacagaagcg atttcagcag agccgccgag cggctgtgct catccagcag cactaccgct 180
cctaccgccg caggcccggc cctccccacc ggacttcggc caccctgcct gcccgcaaca 240
aaggctcctt tctcaccaag aagcaggacc aggcagcccg gaagatcatg agattcctgc 300
ggcgctgccg acacaggatg agggaactga agcagaacca ggagctggaa gggcttcccc 360
agccgggact ggccacatga cctg 384

<210> 1287
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1287
cagaagacat ctcctgtggg gtgaaacagc tacctcatcc ctctgtagtg tcacaaacac 60
atccatgatg acatcagaga agataacagt gacaacctcc acaggctcca ctcttggaaa 120

cccaggggag acatcatcag tacctgttac tggaagtctt atgccagtca cctcagcagc 180
cttagtaaca gttgatccag aaggacaatc accagcaact ttctcaagga cttctactca 240
ggacacaaca gctttttcta agaaccacca gactcagagc gtggagacca ccagagtatc 300
tcaaatcaac accctcaaca ccctcacacc ggttacaaca tcaactgttt tatcc 355

<210> 1288
<211> 341
<212> DNA
<213> Homo sapiens

<400> 1288
attggaagaa ccaacatcta taagaataaa aaagattatt atgatatgta tgagccagaa 60
gaagtgaaaa ttttcagatg tccatctcct atctactttg caaacattgg tttctttagg 120
cggaaactta tcgatgctgt tggctttagt ccacttcgaa ttctacgcaa gcgcaacaaa 180
gctttgagga aaatccgaaa actgcagaag caaggcttgc tacaagtgac accaaaagga 240
tttatatgta ctgttgacac ataaaacat tctgacgaag agctggacaa caatcagata 300
gaagtactgg accagccaat caataccaca gacctgcctt t 341

<210> 1289
<211> 301
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 1289
atcaaaagga gacttaagtg attgagaaaa acatagtgga atccggaaag aatgacacct 60
gaaacaaaga tggtgagtat aataacccat ctatcctgtg tgtggttgtt ttttctcaga 120
atgagggaga agctataaag caaatatctt tatctttatt tacaataact cataagtaat 180
ataaacactg acttggctct tattataact gtatctaggg taccatgaac tttgagtgac 240
tgagtgaaga tggcagaccc atactgtatc taactataga cacttttga ccaataaaca 300
n 301

<210> 1290
<211> 179
<212> DNA
<213> Homo sapiens

<400> 1290
tagtgttttc attcccagat gtcaagcaaa gaagtggagt tataaatttc tcgactagat 60
aaacctacaa cagcttagaa tacatttgtt ttaaaatgtg attaaattat tataataaag 120
ttctcataac tctaggacaa aactactatc tttgtacaag gtatacattt tttccttat 179

<210> 1291
<211> 313
<212> DNA
<213> Homo sapiens

<400> 1291
gtttaaaaca ttaaaagtaa agggttatat aaacattcat aagaatatta aaatgtgctt 60
caaagtaaac atcaggtaca tcaaaataaa tttaaataat tagaagtcat tttaggcata 120
aataaaaatg ctatctttca tttatccgta tgcctaaaat tgtctcttct aagcggaaaa 180
aaaccacttt gtttaacaca gatttttcct tattgtaatt agaaatgcag atggaaagac 240
taaattaggc aatggttgac aggaggaaag acatttgctt taaaatcgtt gggagtgatt 300

tcaagttcaa atc 313

<210> 1292
<211> 332
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(332)
<223> n = A,T,C or G

<400> 1292
agtcaccctg agagtgaaac agatacaaag agagaatgac cctcacagct acagaaagaa 60
atgaaatggg gcaggagaag agggggaaga aagctaaata actgattttt ttaagaatgc 120
cagattaagg ccgggcgtgg tggctcacgc ctgtaatccc agcactttgg gaggccgagg 180
tgagtggatc acctgaggtc aggagtttga gaccagcctg gccaacatgg tgaaaccccg 240
tctctactaa aaatacaaac attagcaaga tgtggtgtca cgtgcctgta atcccagcta 300
gtanggaggc tgaggcaaga gaattcgntg at 332

<210> 1293
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1293
taaacagcat catatagtgt ataatgaatt acaatttgtt attatttaac ggtgcaatta 60
gaacttttt tccccacata ttggtacctg taagttaata tcatcctctg taattattat 120
atagcaatct ttagataaac tgatttatta gttgcctatc aatttatacg tagtaccagg 180
gatggatata aagaatagaa acaggtacag ctgtggagaa tgcaaccatt taagagtggg 240
acagaagtta tctctgcaga ctgtctggag aataaagaaa caaaggaaca gaagctactt 300
ggaacagaag tgttgatgga aa 322

<210> 1294
<211> 332
<212> DNA
<213> Homo sapiens

<400> 1294
acttcaaatc tatattttgg gccctgagct gttgcccaca tttcactcac aatgtaatac 60
tcagaagcct gactgctttg tctctacctt gtcttcctgg cttctgtaat catttttccc 120
ctttttaaac cttttacttt gaataattca aatttataga aaagttgcaa taactggcca 180
ggtacagtgg ctcatgcttg taatcccagc actttgggag gccaaggcgg gtgtatcacc 240
tgaggtcagg agttccagac cagcctggct aacatatagt gaaaccccat ctctactaaa 300
aaaatacaaa aattagctgg gcatggtggt ga 332

<210> 1295
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1295
gtatgtaata agaaaattaa ctctcattta agttagtgat ataattggaa aggaagtagg 60
agaaaatcat atttataaag aaaaggataa acttaagggt gttaactttt tataatagct 120
ctaaaatatc atttgtctct acctgtcttt tagaaggcag tagtatcctc actctcagaa 180
cttcaaaatt aagcaaaaca catagatact ggaaaagtcc ccttagcatc tccccttagt 240
aatgccttct gagaataaaa gtttagtcca aattccagta tttatcaaat tcaactgggc 300

aagaatgcca gcttctaaac attg 324

<210> 1296
<211> 310
<212> DNA
<213> Homo sapiens

<400> 1296
gtttcactgt gttggctagg ctggtctcaa acttttgacc tcagatgatc ctccctgagc 60
caccgcgtga gccaccagcg tgagccactg cgcccagcca aaagctttta cacatctttg 120
aaaagtcttc tgtgtgataa ccatttttgt tcttatatat gataaaagct ttaatctgtt 180
agataataag aaaattctga agaataacta tgattgtgct acatattaat atcaattatt 240
ctctgccaag aattgcatat aacatactta atactaatat taaatatatc tttcttttcc 300
ttcaattatt 310

<210> 1297
<211> 308
<212> DNA
<213> Homo sapiens

<400> 1297
gggacaattt gacatgtatg taaaaagctt taaaaatgta atgtatatta cattatcata 60
catattaatg tatattacat ttacccttcg actcccacaa ttctactatt aaaaatgtat 120
cctatgggga ataattacgt tttaactata aagctgcgta aaaatcaaac tccgcaagaa 180
tatattacaa accagctttg aaactattaa ttttactttc ttttatagat tttcagtgac 240
tctttcacaa ggaccaatta tttttaaaag agttatttta atgtagttaa caataggttg 300
aatttaat 308

<210> 1298
<211> 207
<212> DNA
<213> Homo sapiens

<400> 1298
tggtacaggg agaagtctag ctcctgacca ggctctgatt tcctcggccc tgccctattc 60
aagttcctca aattccttga ccccaaccct tgccccataa gaaacctccc catgaccctg 120
accctgacag agaactggcc gtgaaaattt ttgcattgac aacagatatt ggaatgcagg 180
gtttccctat ctacttcagg ccccttg 207

<210> 1299
<211> 334
<212> DNA
<213> Homo sapiens

<400> 1299
aatccattct cacaaaataa agcaatttta aaattaaaat taggtggttt cattctattg 60
cttatgatca aataaaacat ttctctggct ttttcttgca catagacata atccaagtat 120
tttttcacat gacctacaaa tctctgaatg atttggtctt ttccacttct ccagcatcat 180
cgtctacaat cattactaca tccctttctc tctgcactga cagcttcttc caagcttttt 240
tctgcctcca gccctttgaa ttttctcttt tcttttcttg atcttgacat agctgagtct 300
ttttctttat taaaattgta gacacagcag catt 334

<210> 1300
<211> 300
<212> DNA
<213> Homo sapiens

<400> 1300
ctaccatttt aaattaattt agcattggtc tgttacaaag tgcatataat ttagattcag 60
aagaattggg cttcagttat acttttgtca ctttctcaat atgtaaccta ggataaatcg 120
ctccctcttt ttcaaatttg atgtgtacaa atgtaatatg aagtacttgg caacgtcagg 180
aacatttgat aaggcaaggt atataaagat atgtgtgtag ccaggcacgg tggctcatgt 240
ctgcaatccc agcccttggg gaggccgagg cgggtggatc acctgaggtc aggaggtcaa 300

<210> 1301
<211> 327
<212> DNA
<213> Homo sapiens

<400> 1301
tccaaatgag gcaccattca tcacagcttc tttctcattt ccatctagtg ggtaagaggt 60
ttctcttctt aaaactacaa tttcttaacc tttacaagtt atttaacatt ttctatcata 120
ttaaattagc aacataaaac attatccttt atctataaac ttctagtctg gttccctaga 180
gtttatatac acgtttttat ttctaatctg caagaaaaaa aattcctatt tgttatttgg 240
taacagagca ttaaaagata ctatacacat gtggtgcata tatatatata tacacacaca 300
cacacacaca cacacaaaat acacttt 327

<210> 1302
<211> 149
<212> DNA
<213> Homo sapiens

<400> 1302
ctcacaccat gaagtcaaac cctcaaagat ctacagcctc agtgaaaagt tggataagaa 60
aaacagtctg ctcaccagca ctggacgaca agaaggaagc ttatctgact ctggatgaca 120
aggacggggg aaaagtctct tctaagaat 149

<210> 1303
<211> 334
<212> DNA
<213> Homo sapiens

<400> 1303
ggctgctttt tactcctttg aaaatattat ttcatgcatt acttctcggt agtacaattg 60
aatccttttc tcatttttct agacagttaa tgtcgactgg acctaaaacc tgaaaaggta 120
atatttacaa atttgaacac atatatctgc ctctctgaat atctccattt aaatgtctct 180
taatgtctta tcagctcttg aaaataatta gcaaattgag tagatgcatg acatcataat 240
ttctgatctc acctcaaaga acaacaaaag tctactatga attcaatagt gaattttaat 300
gatttttgca ctgcattcat tacatctata taca 334

<210> 1304
<211> 333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(333)
<223> n = A,T,C or G

<400> 1304
acctattttc ttattgtttt cctgcatatt ttggaatgat atcttgagat tcgtgcttta 60
tgccaaagcc tcacttgatt agggaatatt gagtataaac cattgagaaa gcaacagtct 120
cttgagtttt actaattggt gtgtgtgggg tgtgtgtgtg tncntntgtg tgtatgcata 180

tgtggatatg tgtatgtata ttaaagatat aagtaagaat tttggaatat gaattatatt 240
ttggtttaaa aaaagagggg agttttagtt gtgttagtta tgtaataaaa ttggtttaaa 300
aattagggtg aagtgggggg ggtattttgt tag 333

<210> 1305
<211> 313
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

<400> 1305
cacttgtttg taaaaggcaa gcagaacaca cagaaagata attgagttga attttagcag 60
tatgctttct gcctacacat taaagaataa attattaaga cagaatccac agacccccca 120
aggatatttg aacgtacatt tttctgatga gatagcacaa cactttgagg agatgctcag 180
agaagttcat gacctttgac aagcaatttc tgcattaggg aatatacttt aagattttat 240
tctcagaata cttcaaaata agctataang gtaacaattc cctaaattca aggatttctc 300
atgaattatg ccn 313

<210> 1306
<211> 331
<212> DNA
<213> Homo sapiens

<400> 1306
aatgaccaca tttcacaatt gaacagggga tattatttca tactataata ttatttcaaa 60
ctataataaa gaactggctc ctgtagaaga gaagggaaat tattttctat gatccaaaga 120
attgaaatac atatcagtta tagtaagatt caattgtagt agcaaaaaca attggaaact 180
atttaaatgt gcatcaatac aggaaaatgg tgacatgtac tgtaatacat ccatacaaaa 240
gaatactgtc ggccattaaa agaataaagt acatccttgg ctgggtgtgg tggctaacac 300
ctgtaatccc agcactttgg gaggctgagg g 331

<210> 1307
<211> 333
<212> DNA
<213> Homo sapiens

<400> 1307
attttaacag caaatatctt tctttgttag tgatttaaat cagctgacta taccttgctt 60
aaatccagct tctcacaaaa tagaataaac agcacatggt tttatgattg caccaaatga 120
ttcttaaaaa ttttcccttt gataaatatt gtttctacct atgtagacat aatgtggcga 180
tttggagagt gacattagct tatgatcaaa taggattcca tgactgaaaa cagaaggaag 240
atactttctt tctttttctt tttcttttct tttctttact ttccctttct ttcatggagg 300
tgtacttttg ctgcccaggc tggaattgag tga 333

<210> 1308
<211> 327
<212> DNA
<213> Homo sapiens

<400> 1308
tcgaactcct gacctcaggt gatccacctc gcctcagcct cccaaagtgc tgggattaca 60
ggcatgagcc accatgcccg gcctactctt taataagtgt aaaatatctg tgatgaaaca 120
acttagtctt taatcaaaca atataccgta ctgtatctta ttttttaaa aaaatccaaa 180

tttattaaag ttcagagtaa tagagtttga ccaaatttca ttagcctttc taaaacacag 240
aatgatgtgg aaaacataaa gggattacga tagggaatct cacttaagat ccaaggtaat 300
tttggcaata aactaaaaat tttcttg 327

<210> 1309
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1309
ttagcaaaat gcctcttcga catctatggg atcatttaaa aaatgttttg ggggacttaa 60
ttataattct cctctaagct tttgaagctt agctaagact attacctatt ctcttgggtt 120
ttgctaccac catgtgctag tatgtgacag atgtttagat ggctgtgacc aggcagactg 180
gtcacttcaa aacttgtttg agccatatgc aagagaaaac ataatgtcga gacagaaagc 240
tgaaaaatgt gtaaacaata aaattaattt ggtaagttat gaccaacagt attcttttta 300
atgagataaa ataagtatat cagaatacat tgaac 335

<210> 1310
<211> 320
<212> DNA
<213> Homo sapiens

<400> 1310
gagttttcat ttgtggtgag attctctccc aggccacaag acatttcctg ctcggaacct 60
tgtttactaa ttgtaagtac tttacaagta agaacttgtt ttaaaaactt agcattcaaa 120
aaaaaagctt tctttaaaag ttatttgatt ttcttgtttt ttttcttagc atgttatatt 180
ttgagtttca gctaaaagac taaggttttc ttatctaatt gctttaaatt tatacattta 240
gtcaaattca acaatttctt gctaagcatt ttgccagatg ccaggctttt caaagtagtg 300
taagatccca gccttgaatc 320

<210> 1311
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1311
caaccttgac aaatagaatt ataggagctt acatgttctg attgatagat gagcagactt 60
tacaataaaa attataaaag gtagatagat attttatgct tgcattagaa aatatgtagg 120
ccaaccaggc agtggctcat gcctgtaatc ccaacacttt gggaggccaa ggtgggcgga 180
tcacttgagg gtgggagttc aagaccagcc tggccaaatt ggtgaaaccc catctctact 240
aaaaatacaa acattagccg ggcatggtga cagccgcctg tagtcccagc tactcgggag 300
gctgaggcag gagagccgct tgaaccctgg agtgc 335

<210> 1312
<211> 268
<212> DNA
<213> Homo sapiens

<400> 1312
aaccccactg taggagcact cttgaagaaa atctgcctta ccatctttaa caagagttta 60
aaaatacttt tttctttaaa aggtacttac tgatccagcc ctttataaga agaaaaaccc 120
ttagtcccca ttttctaaca gtgaatttat taggtttctt taaagaaaac aataataaaa 180
gacccaggcc aaatctattt taattcataa gaatctttctc ctaatgaggt gcttcattcc 240
attaagctta aatcaaccca aactgaag 268

<210> 1313
<211> 125

<212> DNA
<213> Homo sapiens

<400> 1313
tacgttcttc taaaacacat attgtgaatt aatagaaata ctattgaaaa attggaaacg 60
taatttgaaa tcattcaaaa gcaaacgcct ccacttgagc cctattagag gaatatgaac 120
aaaat 125

<210> 1314
<211> 315
<212> DNA
<213> Homo sapiens

<400> 1314
atatctcata tactccataa atatatatac atactctatc cacaaaaatt aaaaataaaa 60
aaatagtaac aaagtttttc taaatttaat agtgttttag aaattaaaag agacccaaga 120
ataaaaggaa aggtgaacta agagagatat aggttaaaaa gaaatataag agaaataagc 180
tatgtaagag atacaggccg ggcgcggtgg ctcatacctg taatccaaca ctttgggagg 240
ctgaggtggg tggatcacct gaggtcagga gttcgagacc agcctagcca acatggtgaa 300
accctggctc tacta 315

<210> 1315
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1315
cttattgccc actcttacca atttgacaga gacttctgaa gataattcgc aattctaatt 60
aaggttttct gaaacagttt tggcggtggt tgtttttgg tgtgtgtgtg tgcatgtgtg 120
tatgtggtgg tagtgatttc taaaatatat agttttaaac attgaacagt aaaggttagc 180
aatgatatct ctttttctc tgtgatttac tgtgctttct aatgttctac atttattgta 240
tattgacttt atagtcacag aaaacatgct atacaactat gtagatgtat tttcgaaggc 300
acgcattaac ctatcag 317

<210> 1316
<211> 322
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(322)
<223> n = A,T,C or G

<400> 1316
taaacagcat catatagtgt ataatgaatt acaatttgtt attatttaac ggtgcaatta 60
gaacttttt tccccacata ttggtacctg taagttaata tcatcctctg taattattat 120
atagcaatct ttagataaac tgatttatta gttgcctatc aatttatacg tagtaccagg 180
gatggatata aagaatagaa acaggtacag ctgtggagaa tgcaaccatt taagagtggg 240
acagaagtta tctctgcaga ctgtctggag aataaagaaa caaaggaaca gaagctactt 300
ggaacagagg tgttgatgga an 322

<210> 1317
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1317
tggagggtgc cggaattatc tggaagatct gggagcgtct tcactcatac gtccggtgtc 60
tgggctggat gactccacgg ttgtgcgcag ctggaggaca gctgacccga gtgcccacac 120
gtggcctctc tgtgtgactt gggcttcctc acagcatggt ggtctcagga caggcagact 180
tcctgcatga cgtttggttc atcaaacaag gcagaaggtg aatcaccttt tatgatctag 240
actcagaagt tgcctctatg ctggagtgca gtggtgtaat tatagctcac tgcagccttg 300
acctcctgga ctcaagagat actcctgcct cagcctc 337

<210> 1318
<211> 323
<212> DNA
<213> Homo sapiens

<400> 1318
tcatgaaata aagcgtagaa gttagtgcac gaatttgttc tgggcgtttg ttttaatatt 60
ccagcatttt gtttctattg ctaactgatg agaaatgctt taaacacata cacatgttct 120
gatgtgtatg tgtgagactt gcgtttccca acgttgcata acatatgcac aaataagtgt 180
aagatagtgc aaaataactg caaatagctt tatcttacac agaaagacag gtgaacagct 240
cgtctttaat cttaagcata acatttgttt tggtaatctt ataaagattg cttcttgcac 300
atttttaaag aaaaaatgtg aaa 323

<210> 1319
<211> 323
<212> DNA
<213> Homo sapiens

<400> 1319
gaggttcatt aaattgtaaa aggtcactca gctctttaag tggaagcatg tggattttac 60
ataggtatgt taaaatcctc ttacacagag cccagacttt ccaaggttta ttctgtgtgt 120
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gctcaagttg aggcccaggg tgctcacact 180
tgaaagagag aggctgctcg gggcaatata gatctaacgg ggggggatat agaattgaat 240
acgcaatacg acaagaccta gcttacgttg tgaaatgaac tatctcttcg gtgtgcacgg 300
tgacacacgc ctgttattct agg 323

<210> 1320
<211> 312
<212> DNA
<213> Homo sapiens

<400> 1320
ggtcagctgg aaggagcgtc tacaaaagaa tcttaatagt attccctata tcattaatga 60
agacaataat ccacaggtat cagcagtagc tgtctttatt accaatagac agcattaaaa 120
atgttgacat taccattctt gcagataacc tggatttata ttcatcaatt cattgaacta 180
atcaatttta aaattaaggc caggcgtggt ggctcacacc tgtaatccca ccactttggg 240
aggccgaggt gggcagatca cctgagttgg gagttctcga gaccagcctg gccaatatgg 300
cgaaatccca tc 312

<210> 1321
<211> 130
<212> DNA
<213> Homo sapiens

<400> 1321
ggtattacat cttgtaaagt ggcttttccg gtatagcttt taactgcttg tggattatat 60
atgtgaagga aagtctgatg gcatgatagg atgcttacta ttggaggtgt catgttataa 120
tgctatctct 130

<210> 1322
<211> 267
<212> DNA
<213> Homo sapiens

<400> 1322
gagccctcct gggctaagcc caaaatttgg ggctcccctg caatggatca gaactgtgtt 60
ctcagagggc aatttggaaa ccaactggca agtgaaaaat tttaacagtc tttacaaatg 120
ttagcacaaa gctttcatga tctgagtagg taatcttaac tcatttcatc tgcctctgca 180
gatgcaaatt ggatctcact tatttattta tttatatttt ttgagattga gtctggctct 240
gtcacccaga ctggagtgca gaggcac 267

<210> 1323
<211> 334
<212> DNA
<213> Homo sapiens

<400> 1323
tacattgttc aggtcttctg tgttcttacc caggccccac tcaacctttg agctattcca 60
gtatgagagt gaattagacc tcccactacc acggtcttac tgtcatttct catggcatta 120
gtcttaatat tttttatatg gtaattctat gttcaagact gtgaacatat tcaggttcca 180
agttattttg tgttcattaa aaattttact ttgaatcatt atgaatagtt cctaggttga 240
gcttcgggct ccctgacccc agagcagtct ccatttgcac gtgttgacca tattctctaa 300
cccgtcccat aaaattgatt ctactatttc ctgc 334

<210> 1324
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1324
gaatcaacgg ggagtggttt aaggccatta ctgagaggca cagagctacc actaatgaag 60
ggggtgcgat ggcatagaga agccttctga acaactcagc tttcaacatg tgcaagaatt 120
actttgacaa aaaaattaca attttctaat ttaaaaaaaa attactaagt tattgggctt 180
atctaggctc tagattgggg gatatgaaaa tcatttcaag taattatctc atagtatttc 240
atcccactga ctacaaggct acaagagaaa cctcccttgg gagaaaatga agaaaaatat 300
ttaataggga aacagactaa tt 322

<210> 1325
<211> 313
<212> DNA
<213> Homo sapiens

<400> 1325
gcatcttcat tactgaaaat ctaatttgtt tctcaaaatc ttcgctggaa atattgaact 60
ggagcagaga attaaattag ctcaaattca aatgtggttt gctgtcattc gagcaaaatt 120
ggtctctctc ctgaatttct acaacttcct gtccattatt ttggtggact ttcctgagga 180
aagtggtaat ttgctgaaat caaaacataa taaaaatggc ccccattttc taggatctta 240
agcaggtgga actgacttta ttcaaatccc agaggaaaga tgagacacag acttccgttc 300
tctgagctgg cca 313

<210> 1326
<211> 332
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(332)
<223> n = A,T,C or G

<400> 1326
ggatgggtag ctggataaat agatgagttg gaggtagatg tggggagaga aaanactcan 60
cggggacgga aagcacaggg aggaaaaatg gccaccagag ataacagagc agcctatgct 120
aattaatgat caactgtgtg tggttttttt cttttccccc cctgtttatg ttcctccttg 180
ttcctccctt ctccctagct tttcttccat ctcctctcct aatttcatag tttcccatcc 240
cattttaaat ccccactttt ttctccgctc cccaaatcct tctccactcc ttctcctttc 300
tctctctatc acttccctct cccccatctc cc 332

<210> 1327
<211> 330
<212> DNA
<213> Homo sapiens

<400> 1327
catatgttcc tccaagtcta ggaaccattg ccataaatat caaccgcctc ttcctcgtga 60
gaccacagta actatgggat gatacaataa gggcaagatg aaagatcaaa gctttggtga 120
aggaaagata atggaataaa agacacggct gtgtatcctg taattaccac tatacaaaca 180
ggcatcagct ttatagtaat aatcgtagag catttattct gcacttccta tatgccaggc 240
tttttactct tttatgaaca acatctcact tgtcacagct tgaggctgta agttgaatta 300
tgtgttgctt actaaagata ctggaaatta 330

<210> 1328
<211> 331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 1328
ttagtatgct ttggaaataa ataggatttt aacctccagg gaaaatcaaa ttgaaaaaga 60
aacttttgtc aataatttat tcaattcaat ttaacttctc tctgccttta ccataatcaa 120
aatttctggg cactcaaaat tggaatctga taaggctaag aaaacaactt gactgatcac 180
acagcagaag tagctgtctt gaacttttcc tcatgtactt attgtccaca tgtatgtctt 240
cttttgaaaa atgtttatat tctttgccca ctttttaatg gggntgtttg tttgtttctt 300
atatatttgn tgaagttcca aataggaaga a 331

<210> 1329
<211> 330
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(330)
<223> n = A,T,C or G

<400> 1329
catatgttcc tccaagtcta ggaaccattg ccataaatat caaccgcctc ttcctcgtga 60
gaccacagta actatgggat gatacaataa gggcaagatg aaagatcaaa gctttggtga 120
aggaaagata atggaataaa agacacggct gtgtatcctg taattaccac tatacaaaca 180

ggcatcagct ttatagtaat aatcgtagag catttattct gcacttccta tatgccaggc 240
tttttactct tttatgaaca acatctcact tgtcacagct tgaggctgta agttgaatta 300
tgtgttgctt actaaagata ctgggaaatn 330

<210> 1330
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1330
tcatgaaata aagcgtagaa gttagtgcac gaatttgttc tgggcgtttg ttttagtatt 60
ccagcatttt gtttctattg ctaactgatg agaaatgctt taaacacata aacatgttct 120
gatgtgtatg tgtgagactt gcgtttccca acgttgcata aaataggcac aaataagtgt 180
aaaatagtgt aaaataactg caaatagctt tatcttacac agaaagacag gtgaacagct 240
cgtctttaat cttaagcata acatttgttt tggtaatctt ataaagattg cttcttgcac 300
atttttaaag aaaaaatgtg aaat 324

<210> 1331
<211> 162
<212> DNA
<213> Homo sapiens

<400> 1331
ggcttcttcc ggccgggccg agaggtggct acattcgttg aaggacacca gctgcggaat 60
ttgcggcttt ggcagattga aatcatggca ggtccagaaa gtgatgcgca ataccagttc 120
actggtatta aaaaatattt caactctttt cctctcacag gt 162

<210> 1332
<211> 329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(329)
<223> n = A,T,C or G

<400> 1332
aaactatgcc tatcttcaca cacacacaca cacacacgca cgcacacaca cgaacaccta 60
tttaggatgc aggaaatatg gaataagaaa cttttaaagc aagcacagaa gaaaatataa 120
tttcaaataa gggtcagttt aagattgaat tttgagagga tgttgaaata cacatgcaat 180
gaaactggaa atagtaagtg aaaagccaga cacaaaggat atttgggggt tacataaatg 240
aaaattatta caataaaagt atatatggat aagaattata attaatggaa catctatgcc 300
taanaaaaaa aattaaaaac ctaaaaagg 329

<210> 1333
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1333
aagttgcctc agaatgagac acactctttg acttcacatg caacagaaag gcacagtttt 60
atttcaaaca aagcagtgtt ttgctgtaac accgttaaaa actggaaagg aaaactcaat 120
caaaccaaaa actagatgct taggaataaa tggtagaatt cttacaaaac caccacgctt 180
caattcaatc taaatcaatt caacaaatcc gtgctgaaag tataacattt agttttctta 240
gacaccaaat gaacaataca aaatccctca agggacttag aacattcaag ttttctatat 300
ctgtggttct aagtctgtta ccaacttc 328

<210> 1334
<211> 195
<212> DNA
<213> Homo sapiens

<400> 1334
tcatgaagca taacatagaa ttgaatacct gtggagcaca aaacaaataa caaactatta 60
ttaatatcat tgaaataatt cctatgtttc ttccatgtct catgctgtca tctttcctgc 120
atcctcactc acagaaaacc atttgtacgt ataatttggt tatcttgctc ttctctttaa 180
taatttttatt accca 195

<210> 1335
<211> 330
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(330)
<223> n = A,T,C or G

<400> 1335
tatggtatgg gagaaagaga gagaaagagg gcaacacgcg cacacacaca cacacacaca 60
cacacacaca caaacacaca cacacacccc cctgtgtgta acccagctga aaaagatctg 120
aatcagccag tggttatgag agggacaaaa attggggtat gggggtgtca caggggactt 180
ttttttcttt ttctctcaca tctctggtgg gaggaacttt tgccttttct ttagttgtgt 240
cttctatttt gttttctcag gaactggctc agcacagtat tttcttaaga taggttcttg 300
ctttgtcacc gaggctggag tgcannggcc 330

<210> 1336
<211> 308
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(308)
<223> n = A,T,C or G

<400> 1336
agagtaattg tggtgcacct aatttagaag cttttgaaca aagattatca ggaggtaagt 60
gaatgagtct tggaaatact taggagaaga gaattccagg gcagcggaca agcaatgcag 120
aggcagaagc ataccaattt gtggaagtgt ttggagtgca ccagagaaga gaagcagaaa 180
agaggtaatg ggggcagatc tcaaaagcct catagatcac tgtgttattc tacagaaatc 240
tatgaggaca taaatatatg agtacaaaaa tgttcttgca gcattgtttg taagcagcan 300
aaaattaa 308

<210> 1337
<211> 212
<212> DNA
<213> Homo sapiens

<400> 1337
agatacagcg agattccctt ctattgttta catgtcacgg atgaaaacaa aatacgttag 60
tcacttttaa tcagttaaaa acattgaatc aaaacaatct tgttgctcag ttcaaactat 120
cttcttatcg attattggtt ttcctctaat tataacacca caaaaaatag ctcctctgag 180

tgaaatcata taatagaaaa tgacagataa tc 212

<210> 1338
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1338
gagaggaaca gtgggcgcaa ggaagtcagc ttctcagagc tcaagagtag atctgagttt 60
aactcattaa agatggcatg gaagagcagt gtcataatgc aaatgggaag atttcttctc 120
ttagtaattt tatttctgcc acgtgagatg acaagttctg ttttaactgt gaatggtaaa 180
actgagaact atatcctgga tactacacct ggctcccaag catctctgat atgtgctgtt 240
caaaaccaca ccagagagga agaactgctc tggtaccgac aggaggggag agtggatttg 300
aaatctggaa acaaaatcca ttcccgcg 328

<210> 1339
<211> 332
<212> DNA
<213> Homo sapiens

<400> 1339
cggggatgtg ttgggactta ccactcttat actgccccgt aaaaagggct ttgtttgcga 60
atcatgagat gctattactt tattcgtccc catcataatg tggaatacat gagtttacta 120
caacaactgc atttattcta tggttcaggc tcacatctat gagtgcaact tcttctaggc 180
tgaagcagga gaattgcttg agcccatgaa gcataggttg cagtgagccg agatcattcc 240
attgcgctcc agtctggcga cagaacaaga ctctgtctca gaaaaaaaaa aaaaaaaaaa 300
attgcggggg cggtttttat ctaaatacca cc 332

<210> 1340
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1340
aagtttgctg gacaattacc gtgtaaacgt catgacccgt cagtacctaa cactgcttcc 60
gtctctacag tagccacggg caccgcagcg gcctcagagc agaaggcaca gggtactacc 120
agggaggcat cgcagggcgt caacaccgag gacctgaggc caccgccttg agccacgccg 180
cgtgcaggag cgggtcctgc gcgttcggcc ccgggaggcg gcctgcagaa accgtccaaa 240
gggctggcct tgttgttcgg gcacacctct gactgggccc cagtttctgg agggcaggtg 300
tggggaaggc ttgtccc 317

<210> 1341
<211> 244
<212> DNA
<213> Homo sapiens

<400> 1341
taccaccctg accagctgac ttcacctgcc atgtggaaag aagctgggaa gagtggggag 60
ggtagacctg ggaaggggac acagaggaga aaggcaggaa cagagacaca aagaaagaag 120
gagacagctg cagagggcca ggcacagtgg ctcacaacta tgatcccagt actttgggag 180
gccgaggcgg gcagatcacc tgaggccagg agttcaagac cagcctggcc aacatggtga 240
aact 244

<210> 1342
<211> 333
<212> DNA
<213> Homo sapiens

<400> 1342
actctgattc tgtctcatct gtggcctgta tgaccacagt cacagcctgc agaaatgttc 60
tgggatctgg tggctcagcc ctcctttctc cttaaggtgc ccataacaag tatacattga 120
gtcaaaaaaa aaaaaaaaaa aaaaaacccg gggggggccc ccgggggaaa aactttaatt 180
ttttttggaa acccccttt ttgggggggtt ttggaaggcc cttttaaaaa cttttggggg 240
ggccggggaa cctttttttaa ccccacccctt tggggccccc cctttttttg gggtttccaa 300
ctaacccccca atttgtggcc ccgggggtta aaa 333

<210> 1343
<211> 327
<212> DNA
<213> Homo sapiens

<400> 1343
gatgaagaaa gagcttcctg caattcaagg actgtacaaa gctgaaacgc agagattttc 60
atattatttg ggagactcag aaatgagctt ttaaggttgt tccttgactt gcgggtcaat 120
aagcgcacaa tggtgaagaa aaggctgcct tctagtgaca cggtgttccg gtttgagact 180
ccgggcagcc caaggaaggc cagcgtggag gcctcacgca gctccacaga cagccccagc 240
tcggtgttcc tcagctcaga ggctgagaat ggtgtggagg agaaaaagaa agcctgcagg 300
tcgccaacag cccaatcccc tacccca 327

<210> 1344
<211> 325
<212> DNA
<213> Homo sapiens

<400> 1344
gctcctcctc ctcccgcgcc ccccgtgcag ccacctgctg cacttgcgca ctgggagcga 60
cacgctcggg cataagtagt gccggaaagt tagctgccga gacctggtgg attgcttttc 120
gtttatcagt gcaggaaaac agcgctatag tactgcgtca caactagcgc agactccggc 180
agtatttaag cggtgcggct tgggaactag aatccacttc ctgtcttccg cctcaggcta 240
gagggcgagc gcttcgccgt gggacttctt ctgcctggct ccgcctcttg ccccggaagt 300
actcacagcg gacggtggtt tttgg 325

<210> 1345
<211> 325
<212> DNA
<213> Homo sapiens

<400> 1345
cgaccctgct gcccccagta gtagggccac cacacattta caagagcccg gatgagcggc 60
taccccactt gcagccacca cctagggcca aaatgtgctc ccagctgcct attacaatag 120
acacaactga aaccatgtcc accctcctca gcaacagggt tgcaatgcag ctgctattac 180
tcaagcattc aactgggcgc ccaagcattc cactggatgc gtggggatca ccccacctct 240
gcctaccaca gccagcaacc acattactac tagggtatat gagaacaggc cctcctggac 300
aaggtccacc ccaaacctcc atgcc 325

<210> 1346
<211> 313
<212> DNA
<213> Homo sapiens

<400> 1346
ctctaggagc ttccaggtca cttctaactg cctgcagctc tcccttctcg gaaccctgct 60
gcattcagag tggagccgcg ctatttagct ctttttttctt gtctttttttt ttttttttaa 120
aaaggggttt ccttttgccc cccgggctgg agggcggggg gcaaataaaa actaatggag 180

gcttctactt ccccaggata acagaattgc ccattttcaa cctcaggaga gaggggaaa 240
agcggccccc cccacatggc caaaataatt tttgtttttt ttcaaactac gggtgttatc 300
acaagaggct ccc 313

<210> 1347
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1347
ggacttccgg tcggcgtgag cgtgaggtgt gggtgttcgt ttctcaggta aaacatggct 60
aaaagcttac ggagtaagtg gaaaagaaag atgcgtgctg aaaagagaaa aaagaatgcc 120
ccaaaggagg ccagcaggct taaaagtatt ctcaaactag acggtgatgt tttaatgaaa 180
gatgttcaag agatagcaac tgtggtggta cccaaaccca aacattgcca agagaaaatg 240
caatgtgagg taaaagatga aaaagatgac atgaaaatgg agactgatat taagagaaac 300
aaaaagactc ttctagacca gcatggac 328

<210> 1348
<211> 300
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(300)
<223> n = A,T,C or G

<400> 1348
ggagcccgga gcgtcgtgga aagcattgga cacatttcca ccatgctaat ggcattttaa 60
atatatttgg caattttccc aatttttac tgaagaaaac tgtaagttta tacttgagga 120
ctgaagtgtg actctgccga ttatcaggct ttcaagatga atctggaaaa actcagcaag 180
cctgaactcc tgacactatt tagtattctt gaaggagagc ttgaagcaag ggaccttgtt 240
atagaagcct taaaggccca acacagagat actttcattg aagaacgcta tggaaaatan 300

<210> 1349
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1349
acagttacct tggtaggaaa gtaacgcttg gtcttaaatt gcttgaggaa tgaagacaga 60
aaaaatgttg tgaaaaacaa gatgacacac caaaagagca catctggaat ataaggtcca 120
tgatgaccac aagctgaccc caagaataca ccacgaagtt ttttacattc ctggaaaaaa 180
ggagaaagaa aaagcagaat ggggattctt acgtattcaa taaattatta tgagcttcat 240
tgactcgtaa gatgcaactg attgtaagag gcaccattac tttgcattcc ttataaagaa 300
aaaacattgt ccagccaact atat 324

<210> 1350
<211> 323
<212> DNA
<213> Homo sapiens

<400> 1350
aatttttcat gtttcctttg aagtaatctc cttaactaca aatcagttct tatcaacaaa 60
tatttataaa ccaaatatga gttgcttgat tatgtttcaa atattaatca tgttctgtgt 120
agaactcttg gaatataata tacagcagaa gcagtctcaa atgctggaga tgcaagtgga 180
gctcagcagt atgaaagaca gagcaacgga actgcaggag cagctgagtt ctgagaaaat 240

ggtggttgct gaactgaaga gtgagcttgc acaaactaaa ttggaactag aaacaacact 300
caaggcacag cataaacacc tag 323

<210> 1351
<211> 323
<212> DNA
<213> Homo sapiens

<400> 1351
aaattactct gaaaagagaa caagagagtg agaaaccaag ccaagaactc ttggaatata 60
atatacagca gaagcagtct caaatgctgg agatgcaagt ggagctcagc agtatgaaag 120
acagagcaac ggaactgcag gagcagctga gttctgagaa aatggtggtt gctgaactga 180
agagtgagct tgcacaaact aaattggaac tagaaacaac actcaaggca cagcataaac 240
acctaaaaga attggaggct ttcaggttgg aagttaaaga taagacagat gaagtacatt 300
tgcttaatga cacattagca agg 323

<210> 1352
<211> 303
<212> DNA
<213> Homo sapiens

<400> 1352
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ttacccattt tcaaatttct gagccaatat catgatttaa ttatagtggc ttcatcgtaa 120
gttttagaat ccgataaagc aagtcccact tcattagttt ttttttcctt tatataatat 180
gccctagaca ttcatttttt catgtgaaaa aatgaaatgc agaattttaa taaaattcta 240
attatgatgg ctgacatcac aattaaaatc ctgcattttt gtttagaggg ctctttaata 300
ata 303

<210> 1353
<211> 297
<212> DNA
<213> Homo sapiens

<400> 1353
caggggctcc ccccagctcc ctaaggcata acggcctcta ctcactctac atggtgcatg 60
aggtattggc agagacatgc ttagcagcat tttgcacata aacaaacact acacgtatga 120
gctctttgta atacccagga catgcctttc acacaaattc cttcggaata tccttccatt 180
tgaatctcac aaccaccaag agggacagaa gacaaatact actgcctaca ttttgtgcat 240
caagaaactg aggcttaaat aattttaagt agcttgcccc aaattacatg ggcaacg 297

<210> 1354
<211> 309
<212> DNA
<213> Homo sapiens

<400> 1354
gctggtaatt tttgtatttt tagtagagac tgggtttcac catgttggcc aggctggtct 60
tgaactacag gcctcgagta atccacccac cttggcctcc caaagtgttg ggattagagg 120
catgagccac cgtgctcagg cttcccacaa taatttttac tttgacacat acagacttca 180
atatcacatt cgtatgcacc aagctatatg ggagaatatc tgtaaagatt catgagttgt 240
tatgtataga gtgcttaaat tgtggacata gaaaataata tttctatcca gatgcagtgg 300
ctcacgcct 309

<210> 1355
<211> 293
<212> DNA

<213> Homo sapiens

<400> 1355
ataaaccatg gtcattttta ggcatgtatc attcatttac tcatagtttg gtttacttaa 60
attatcagga atacaatgtt gcaatgatgc ttaaaaaaca cttgttagtt ttccctgtac 120
caggcaatgg ttataattaa aatgatatgc tgttgagaag ccactcttaa gagtccagtt 180
tgttttaatg ttatgggcag ctaccaattt ggggcgtctc tgtatatttt tggaaagatt 240
ctcatttttt atgcttgaag tatttggtga aaagatgttg gttgaccata att 293

<210> 1356
<211> 308
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(308)
<223> n = A,T,C or G

<400> 1356
aataggaggg acacctcatc acaagcacaa gctaagggca ccacagccag ttatctcttt 60
acaaatggtt tagtcaccct gagaatcaga tgcatgtcta caccctaatg gagagctgtt 120
aataaagtct gattaataag ctatgtcaca gagtagtgaa ttttccgaat gagtgttgat 180
tatgatgtta cagagaaaaa ttatactcat gttaaccaga ttgttgtaag tagtgcaagt 240
ccaaatcatt cttagtgttg tttttggact tctcacgtac actggccaca tctaagaatg 300
aaataatn 308

<210> 1357
<211> 302
<212> DNA
<213> Homo sapiens

<400> 1357
gagtctgtga ataaaacaat aaaagccgtg ggttttatga acagtttcag tttggatttt 60
caagaagcaa aagaaggtgt caaaagaacg accaaggaat aagaggcttt cagaaataac 120
caagaacatc aaaaataaag aggactttta caagtgaaaa atgcagtaat caaaaatgaa 180
ctcaaaagag agattaaata gattagacac aactgaagag aaacttagta agtgagaagc 240
tctatcagaa gaaattatgc ctaatacatg gagacaaaga aatggaaaat attcaagagg 300
ag 302

<210> 1358
<211> 309
<212> DNA
<213> Homo sapiens

<400> 1358
acagtgagca ctctgggtca tgtcagacaa ttccatttat tgaactactc tgaatttgct 60
gcctctgtca atcaaattta atatttcaac tgacataaaa aattgagcaa tttttgtttc 120
cactttattt ttcttttaga acctgaccta gttaactggt gactgctact aatgtcaaag 180
ttatccgatt tttgataagg ctagcgggtc ctgccatttc atttagagtt tattccgcat 240
ggtgtatgca attgttttga atggcatggt aaagatgttt tattaaccct aagaaataag 300
agatccaat 309

<210> 1359
<211> 303
<212> DNA
<213> Homo sapiens

<400> 1359
attttgcaca tgatcctggg aataaagagt cacaggtaaa caaggctgca agaaaagtcc 60
aggtggtgtt cacacagtag ctgcaaactt ctcagaactt ttcagaaatt catccttgcc 120
tgtcattaca ttttttaatg agccactcag cattccaacg aacaacccaa tacatcattt 180
cctctattaa ttggtgcagt taatttgaaa actgttctca gttctatatt tatatgggaa 240
atattaagag tccatctcct tgctcctttt tcattaattc cacacacatt catggagcat 300
cac 303

<210> 1360
<211> 307
<212> DNA
<213> Homo sapiens

<400> 1360
tacggatgac aaaagacgag ccgaatggtc cccattttta aattttggag cttattcaaa 60
aagcttaaaa tacaccatga gccaacatta tatgaagcaa actaaacata tctagagatg 120
cagcttggcc catggactat tcagttttaa cttctgcttt aaaggatgac gctcaattgg 180
cagttcatac atacatatat atatatatgc gcataaaatt cacagacctt tggtttacac 240
ctgactctgt gacttaccaa ctgtgtgggc ttgagaaaga tgcctaacct ctctgagcga 300
aagatgg 307

<210> 1361
<211> 278
<212> DNA
<213> Homo sapiens

<400> 1361
ggactccacc agtctgacct tagagcccca cttttaaccc tgtttaccca gggcccccag 60
gtacttcaaa tctatatttt gggccctgag ctgttgccca catttcactc agaatgtaat 120
actcagaagc ctgactgctt tgtctctacc ttgtcttcct ggcttctgta atcatttttc 180
ccctttttaa acctttttact ttgaataaat caaatttata gaaaagttgc aataactggc 240
caggtacaga ggctcatgct tgtaatccca gcactttg 278

<210> 1362
<211> 259
<212> DNA
<213> Homo sapiens

<400> 1362
ttatgacttt gactatattt tacaacttga aaaattttca tttttatggt gccatcagcc 60
tgctacttaa tagaaaatgc tttattgaca tttatgttct ttacctaatg atgtggattt 120
aaatgatggc tgtcatcttc attagaactg actgtcgaaa gagtacccag aatgacaata 180
ccgaaacccg gtctcatttt aattgggcaa accgagaaac ataacattgg gctgaacatt 240
tcaccaattt gactaccac 259

<210> 1363
<211> 415
<212> DNA
<213> Homo sapiens

<400> 1363
ggcacgagct caggtaaaac atggcttttt gcttttgag taagtggaaa agaaagatgc 60
gtgctgaaaa gagaataaag aatgccccaa aggaggccag caggcttaaa agtattctca 120
aactagacgg tgatgtttta atgaaagatg ttcaagagat agcaactgtg gtggtaccca 180
aacccataca ttgccaagag aaaatgcaat gtgaggtaaa agatgaaaaa gatgacatga 240
aaatggagac tgatattaag agaaacaaaa agactcttct agaccagcat ggacagtacc 300

caatatggat gaaccaaagg caaagaaaaa ggctgaaggc aaagcgagag ataagaaagg 360
ggaaaagcac agcaaaagca gtgaaagtgg caaggggttt ggcctggtat actcg 415

<210> 1364
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(386)
<223> n = A,T,C or G

<400> 1364
tatttaggac tttaagcctc ttttctgcct atctcacata tcattttgca agtcttcttg 60
gaattattta atttacagta ttttgataac ttcaaagctg gtaaaatgaa attagagcta 120
tctgcttgtg ctcagaaatc aattctcatc aaataatatg aaattatgtt atctaaaagc 180
atttacccta ttaagtgaca gacaaatgag aagtaaggag acttaataca ctgtttgcct 240
attgatgaca ctggccacaa acatcccact ctttacaagc agtaacaggg aagggagtct 300
tttgaaaaaa caatttgngc cgggcatggt ggctcacgcc tgtaatccta acacttttgg 360
aggccgaggc gggccgaaca cgaagt 386

<210> 1365
<211> 378
<212> DNA
<213> Homo sapiens

<400> 1365
tttataagta tacctggaca gaagaaatac aagataccgt tctattaact caatatagtg 60
ttgctaagtt cgtacttgtg cttggtttat tttattttat aaataggtat cactcgcatg 120
gttccaaatg cggtaggcac agagagtata tatgatggaa ttacatcctc cttccctgca 180
ctcagcaacc gagatcatcc cgctacgggc actcaaaggt ttcattgtct gaaatattag 240
cctaaacgta gtttatgttt aggaagcaac aaccgtaaat aggcccacat ccaaacggag 300
tggatttagg tttcactttt tcaaggaaaa accatcaaag aatttttcca catacttata 360
aaccatccca cgtataga 378

<210> 1366
<211> 378
<212> DNA
<213> Homo sapiens

<400> 1366
ataactaact tcttttggtc ttcccacatt taataacctc tcgatcagag cctttctttt 60
tttatgtact caaaaataat agaaatgcca tttttaatat ttaccaataa cctatttaac 120
ttagtaagga actgcttccc ctgggggtta gaaatttgta cacagccttc tggatacaaa 180
taatctttat ttaattaatt aatttatttg ttttttgaga tggagtcttg ctctgttgcc 240
caggctggag tgcagtggct cgatctcgac tcactgccat ctcgccacct gggttcaggt 300
aaaaaattct cctgtctcag cttcccgagt agctgggact acaggtgcat gccaccatgc 360
ccaactaatt tttgtatg 378

<210> 1367
<211> 395
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(395)
<223> n = A,T,C or G

<400> 1367
cgttgctgtc gctttttagc atcttaaaat ttatttttat atgagtgcct gtagatttgc 60
cgtatccttt aaaaaacaat tattttaata tatattataa ttgtacatat tttcggtgtg 120
catatggtga aagtcattgg agtggaagat agcaaggagc ttggaaattg aaaaggaatt 180
cagaagttgt tgatgaactc tgaagttatc agcatggatg gttgaatggc atcatagaca 240
actatctaga gagacagtac ttgctttact tttggaaatc agtgtgctgg cattaaaact 300
cagggacttg aaaatgatgg acacagccaa agaatatagt atggtgcctg gggtgtangg 360
agtggaggga gatattcatg cattctgtaa tctgg 395

<210> 1368
<211> 393
<212> DNA
<213> Homo sapiens

<400> 1368
cgttgctgtc gaagtaactg ggcagggatg gttagctggg aggtatggat ttcatttcca 60
ttactaatgc ctgcaattgc tgataataga cgtgccccag gaatcgctgc aagggaaatg 120
gagcaagggt ctccttctgt ggcccagtct ggaatgttag tggtgcaatc tcgactcact 180
gcaacctccg cctcccggat tcaagagatt ctcctgcctc agcctcccaa gtagctggga 240
ttacacgtac gcaccaccat gcccggcaaa tttttgtatt tttagtagag atagggtttc 300
aacatattgg ccaggctggt ctcaaactcg tgacctcaag tgatctgccc gcctcagcct 360
cccaaaatgc tgggattata ggcgtgaacc atc 393

<210> 1369
<211> 388
<212> DNA
<213> Homo sapiens

<400> 1369
cgttgctgtc gaagtaactg ggcagggatg gttagctggg aggtatggat ttcatttcca 60
ttactaatgc ctgcaattgc tgataataga cgtgccccag gaatcgctgc aagggaaatg 120
gagcaagggt ctccttctgt ggcccagtct ggaatgttag tggtgcaatc tcgactcact 180
gcaacctccg cctcccggat tcaagagatt ctcctgcctc agcctcccaa gtagctggga 240
ttacacgtac gcaccaccat gcccggcaaa tttttgtatt tttagtagag atagggtttc 300
aacatattgg ccaggctggt ctcaaactcg tgacctcaag tgatctgccc gcctcagcct 360
cccaaaatgc tgggattata ggcgtgaa 388

<210> 1370
<211> 366
<212> DNA
<213> Homo sapiens

<400> 1370
tggggattca ccgtgttggg caggctggtc tagaactcct gatctcatga gatctgcccg 60
tctccacttc ccaaagttct gggagtacaa gcgtgatcca ccatgcccgg ctgaggctag 120
gattttaatt atattccaac atttcttact ctcttcatta ttactccccа aacagccttt 180
ttaggcattt tcctcctagg ttctgcctgt gaaaatttac tactacagat tattgtatgt 240
ctgtatgtat gtaatgtatg tatctgtgct ttatacataa aatgattact tttgcccttc 300
cttcgccccc gctcttactc ccattagcgg gggtttgctt ccattaacaa agatagctgg 360
gcctgg 366

<210> 1371
<211> 390
<212> DNA

<213> Homo sapiens

<400> 1371
ctttggaaga atgcctaaaa agacgaaagt tggcaaagca gcctgaaaca gtttctgttg 60
ctgaactcaa aagtctgtta gtactcacaa ggaaacactt tttagattat tttgatgctg 120
tgattcctaa aatgattcta agaaagatgg acaaaattaa aaccttcaat atattaaatg 180
attttagtcc agcggaacct aattcctcaa gtctaatgga aaccaatcct ctggaatggc 240
cagaaaggca tgttcttcaa aatttggaaa cttttgaaaa aactaaacaa aaaatgagaa 300
ctgggtcatt acctcattca tctgaacagt tgctgggcca caaagaggga cctcgggact 360
caatcacatt gttggatgct aaagaattgg 390

<210> 1372
<211> 391
<212> DNA
<213> Homo sapiens

<400> 1372
ggcacgaggg caggaggcca gatttggtcc tcaggctgta atttcttggc cccttgtcta 60
gggagaggta aacgagggga ggagagatca gtcaaggatg acgtgagggt ttgctgggag 120
caccaggaat cctggagaag gtagtggcaa gagggtgcag caagctcagc tgggcgggga 180
tcaagtctga ggacttaatg tctcctctga tctccagacc cataagggag atgctgagta 240
gacaactggg gcttatgggt ctggagttca gaggagagat cgggaaggtg tccatttgga 300
gtcatccacg cagagatgtg tgaaggctgc tcaatgattt tgaggtttaa agaaaaaaag 360
agatgtgaaa ccaggggccc tgatgaggct g 391

<210> 1373
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1373
cggtgctgtc caacacatat tgtctggttt ttaacaggag tgatacagaa tggcaaagct 60
tgatccatat agtaagagaa tacaattatt gtcgagtttt aacaggagtg atacagaata 120
gcagaggggc ctgctgatga attgaagggg atccaataaa gagattactg gaataataaa 180
gatgatcagg acttacacta aaatatttgt gataaggata gagaaaaagt gttaatgtat 240
tgggggaaat cacaggatat atcagctgaa tgcttatgtg aaatgagaat gatgaaaagt 300
acttaaatgg agagatggca tcggccactg tattactctg tgctcacatt gctataaaga 360
aatacctgag actgggtagt ttataa 386

<210> 1374
<211> 383
<212> DNA
<213> Homo sapiens

<400> 1374
cgttgctgtc gcacacacac acttacacaa tggaaataca atatatatgg tgaactcatt 60
tacaatacgc gattaccagt tttccatgtt agtttttcta cccttacctg atcatttta 120
cgactactta aaatttctct gctggatcaa caatatttta tctacatcct atcaatggct 180
cacttttagg tagcttccca tatttttact cttacaaatg aacattatgg aggaacacct 240
ttgagcatat acctttctac acttgtccaa gttttctctc tctctccccc cctttttttt 300
tttcacctgc agacacaggg caaccaagtt gtcgtcttca aattaatttc tcagagtcta 360
ctctctggat aataggggtg agt 383

<210> 1375
<211> 385
<212> DNA
<213> Homo sapiens

<400> 1375
cgttgctgtc gggggaatat gtcctggcac tgaagcaaga gctacgagga gccatgaggc 60
agctccccta cttcatccgg ccagctgtcc ccaagagaga tgtggagcgt tattcagaca 120
aatatcagat gtcaggtccg attgacaatg ccatcgattg gaaccctgat tggcggcgtc 180
taccccggga gctaaagatc cgagtgcgga agctacagaa ggaacggatt acaattctgc 240
tccccaagag gccccctaag accacagaag ataaggagga aacaatacag aaactagaga 300
ccctggagaa gaaggaagaa gaagtaactt cagaggagga tgaggagaaa gaagaagaag 360
aagagaagga agaggaggaa gaaaa 385

<210> 1376
<211> 380
<212> DNA
<213> Homo sapiens

<400> 1376
cgttgctgtc gggaatgggt cttagtatat cccctatctt ccctttccac tgccctcacc 60
tagtcttcaa ccctgagtaa tggggtgttc atagaactct aatggggtga taagatattt 120
tatagaagta gaatcttgat ctgacctctc cttctaattg ggaacgtcta tgttctaact 180
agcagaaatt cctcaaagtt tctggcatat ggaaaatttt ccctctattt ttattccttt 240
gatcatttca atgtgaattt agaatgaggc aatttagaag cctgtcctcg caaagccatt 300
ttatttaaaa accacaaaat aacacttttt ttctgtgtga agaaggttag aaaaaaaatg 360
ctcaagactc ataattatat 380

<210> 1377
<211> 369
<212> DNA
<213> Homo sapiens

<400> 1377
cgttgctgtc gctgggactt gttaggcatt aacatatatt agtcaaacga gtgactcctt 60
acaaatataa attcttttag gtgacatggg aagtaaatat ggttttaatt gtagcacccc 120
ctacagggct gttatgcaga aaagagtagc taataggctg gaccctagaa gttgtactgt 180
ttctggtggc acaaagaatt tctttccaag gttctgatga ctcttttta ttcctaataa 240
gttcttaaat ggttatgttc atagcttgag gttcaggctg cacaaagaag ttactttcat 300
ggatacagtt agaacttcta ctatgggcta taataataaa ttttgcacca taacctactg 360
gcagggctt 369

<210> 1378
<211> 342
<212> DNA
<213> Homo sapiens

<400> 1378
gcaggtaatg agactgcaga aaggctgaag gtagattagg ataagatcaa tgaaaggctt 60
ttataaagca gttttgaatt gtcctttaga aaataagaag ccataaaatt ttatttttta 120
ttttcaaaaa gatatttcta acccatatta gaaatggatt agaaatagat aacatataac 180
atttggagaa gatagaagag ttagggccta taggaatagt tcaagcaaaa atcatcttat 240
cttaattttg gatactttct aattacttcc tatcttgaat aattagataa cattaatcat 300
agtggacaca tgcatacata tgtttattgc agcactgttc ac 342

<210> 1379
<211> 362
<212> DNA
<213> Homo sapiens

<400> 1379

cgttgctgtc gcccacacag ggcacagacc ccacgcaccc cacacggggc aggcagctca 60
cacagggcac agaccccacg caccccacac agggcacaga ccccacgcac cccacacagg 120
gcacagaccc cacacacccc acacaggcca ggcacctcac acagggcaca gaccccatgc 180
atcccacaca gggcaggcac cccacacagg gcacagaccc cacacacccc acacagggca 240
ggcaccccac acagggcaca gaccccacgc accccacaca gggcagggat cccacgcagg 300
gcacagatcc cacgcagggc agggccagcc caaggccagg cccctcccct gtagatatcc 360
tg 362

<210> 1380
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1380
gatgtgtgat aacacatgca accacgcctc acctcacctg agactggtgg cccagagttt 60
ttcttaatgg ccatcacata cgcatacagt gcctgcatgg ctgacctcag ttactgaagc 120
tgcagccaga gagggaactt aggtcttcac tgtaaatcac attgttagga taaactaaat 180
ggaaaaacta aatgaagtac agtatagctg aagacctccc agcaggcaaa atgctcttat 240
cagtcagaat gtttcaaggg ctcagttcca aggagccagc caagggccag tcatgaaaac 300
ccccattcat tggtaatg 318

<210> 1381
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1381
tctggggaat aaaaagcact aatggacagg agatgggttt tgcaaaccat gaaaggccat 60
gtgcagctga gctggtatta tcactggagc ctggcacttc gccttcatct gtggtttcct 120
ctgtgtcagt gaaaccacag ccactagagg gggagcaact caaggtgggg cccggggtga 180
ggagctggag cctgagcccc cagtggagaa gtgagtgggg gtctccagct aggaaggaaa 240
gggtgggagg tggagagcag ccccaggggg cagtcactaa gccccatgca gggcagaatg 300
ccaggaacac aggctcca 318

<210> 1382
<211> 311
<212> DNA
<213> Homo sapiens

<400> 1382
ggtactcaca agttaacaaa cttcaaaatg ctatttgaaa gggaaactaa taacattaaa 60
aagaggtcac agtactgttt gaaaatctac aaaggagtca tgatctttgt tcaaggaagt 120
aaaatattaa ggaaatttgt gttagttgag ttcttgactg aacatgtgct atgaatttct 180
gattgtggaa gctgcttcct attcgaaaat aaaataaaac tctcttggta tgcaaatgat 240
aagaatatgt tttggtatct aacaatatct aaaagcaaac tctctgcaaa gtatcccaga 300
atggtttact t 311

<210> 1383
<211> 405
<212> DNA
<213> Homo sapiens

<400> 1383
attgttatcc gaaatagaga aataactcct gttaatcaag aaaaagacag aaacttcaat 60
gggaaaaaaa ggaccaatga aagagacaaa ctaccataga tcagatttct tcccatagct 120
aaacagtata caaagaaact tcatatttat aattatacaa atgcaaatca aggcagtgag 180
tcattactct tatcagaaag actctaattt aaaaggataa acacaacaat tattagaaaa 240

tgtgcatagt gttaactttc actcacttgt agtgaaaagt agtctggaaa tattttatac 300
atcatagaga aattccgaga atcatataca ggtagatgat gataaggaat atggtattgc 360
ttgtggtgac agtcatttgg tggcactctc atgattggtg gcaat 405

<210> 1384
<211> 425
<212> DNA
<213> Homo sapiens

<400> 1384
aagctacttc atagagctga cattctaggg agaagataga catggcagat ttaattatac 60
acatatcttt ttcactgtat tagatttttt cagattataa aattatagta ataaaatagc 120
aatatcaaat attactgaaa tacataacat aggaaaaaat atgccctgtc aattcatcct 180
ccctccccag acgtagccac tgtcaaccag tttgtgcacg tttttgtaac ttttaaaaat 240
atacatgcaa tgtattttta aagcataaaa ggggaatcat acacgtctga attttgtttt 300
ttagcttcat atatctggga tatcctctca catgaacaca aggaaatcta cctcattctt 360
tttaatgtct gaataatatt tcatgctatg gatgtattat agtttatttg actaatatct 420
tgttg 425

<210> 1385
<211> 388
<212> DNA
<213> Homo sapiens

<400> 1385
agaatactag gtattaagta aatattgttt gagtagataa aagacattag tgttaagcaa 60
taacctaca ttcttaaaaa agagagagtt ttattaaatt gctaggaact taaaattttt 120
ggatctcaca ttccaaatgc ataacacaag attttgcttt cagtgtgtat cactcaaaat 180
taagctagta acaggtaaac tagctatgtt ccctattctt atttcttgga tatgaggaga 240
ggaaacacat gcagcaggaa agaaaaaggt gactaacaat tactaaattt cgagagtaaa 300
ttggattgtt ttgctctgtg caactataaa atggtgatta acaaacaggt gctaaatgtt 360
aatgaagtat atgagattaa aaataaac 388

<210> 1386
<211> 388
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(388)
<223> n = A,T,C or G

<400> 1386
gatttttgtg gtgagattct ctcccacgcc acaagacatt tcctgctcgg aaccttgttt 60
actaattgta agtactttac aagtaagaac ttgatttaaa aacttagcat tcaaaaaaaa 120
aaaacctttt tttacagctt attgaattct ctggtttttt tctaaccagg taatatttgg 180
agttgcacct aaaaaactaa ggtttcttaa tctaatggct ttaaattaat cctttaagcc 240
aaattcacca tttttttgtt aaccttttcg ccaaaggcca ggtttttcaa agaagggaaa 300
aaccccaccc ttgaaccctc atcattggcg gttttcggcg ccaaacccat attatccttg 360
tgtttaagaa ccaggaccat tatttccn 388

<210> 1387
<211> 421
<212> DNA
<213> Homo sapiens

<400> 1387
ccatcgattc gaattcggca cgaggttgcc atactcttgc atacacaatc ggttatctag 60
tttttgattg tttgtgtgta tggtgtgtgc tgtctctctg accagatttc aggttcctga 120
ggcgagcctg cagctcatac tgctcatctg tcctctcctg tggtgggtgc tcagggcctc 180
tcactgttag ttactccctc ctttctgccc agttctgcac tcaactagta gaagcagcca 240
tcctttcccc aagcaggaaa tagtagtggt cgcccttaag agcagtgtga gggcagaaga 300
ttaagggagg ggaagagtcc ctggaactgg aagaaggtaa atactttgcc ttgagagggc 360
gccgaatcat tttaccacaa tagtaaatgg aaaaagtgtc aaaggttggg actacgttta 420
g 421

<210> 1388
<211> 415
<212> DNA
<213> Homo sapiens

<400> 1388
cgttgctgtc ggccattctt tggcgagatt atcatttctt gctgcaaaga tgatttgaga 60
cactaactac gttgttaaat gccccaaaat taccatgatt tccatcatag tttaagtact 120
cagtttcatt attgttggtc tcaaattcag agatgaatag gaatgatgga taggatttat 180
ttaagtatat atcttaggta tacatttatt tagtgcgggc tgattaatgt gaaagttaag 240
gtataaaacc tagagacaac tttcagggaa aaaaaaaaga tctcttatta aatgttttag 300
aagtagggat tcccattcta tattgaaaat aacataattt caccacttgg ttattataat 360
tttttggggt tgggtgaaca tttattaaaa caaatgtgtg tggtctgaca aaaag 415

<210> 1389
<211> 417
<212> DNA
<213> Homo sapiens

<400> 1389
ggcacgaggg acagcgaagc caaagaggac ccctcaaacc caacaagagc tgtgcggctc 60
cctgattcct cgccagtgtt gctaccgccc ttggctcttc ttgcatggct ggctcttgag 120
acccctggaa gctgatggag gcaacgtgag aagcacatgg acatccgacc ttgagcttga 180
gaggcagagg cctgagttct agttacagcc ccagcagtac cagttgtgtg gactgggagg 240
gaggctatca cgtacatact ccaagcctcc aagcctgttt ccccttctga cacaggatct 300
tttgtggctg gtatagagtg ggcactcaat aaatgctgtc tgtcgtctgg ctggatgcct 360
catgggcctg agaattgaat agaattacag tgatagaagc atgctggtat tgaagtg 417

<210> 1390
<211> 203
<212> DNA
<213> Homo sapiens

<400> 1390
gggtaaatct tcaggtaagt gttcctggtg cctatgttgt gaaacacaaa aaataaccga 60
aaaatttaag ggggcggttt tttttggggg ccccaagatg ggaatatcct ttgggggggt 120
ggggcccacc ccccaactga gggtggggaa aaaaagggtt ttttttgaaa attcgggggg 180
cttctggttt gttttgaccc att 203

<210> 1391
<211> 411
<212> DNA
<213> Homo sapiens

<400> 1391
cgttgctgtc gaaaaaagaa ccccgtgtgt tgtaaatcaa ggaaaaatgt tgggtaacag 60
actatgactt gactttgtgc ttatatcatg attgtattta attttattat aagttggtta 120

aatatttgag actttgggga aattaaactt gtcaagctgt caacttatca gtttggattt 180
atggtttcct atttcatttt gtagatattg aaaatacatg tcaatatctg tgtatttcat 240
gtcaaggaag ctgtgtattg gtatcaggat tgagggaata catgatcaac aaatactttt 300
ccaagtttca gtgtcacaga ttgcatatgg catgataata catcacattc atttccctca 360
agtttgtttt ttttttgac agggagttaa caaaaaatgt gcaaatggcc a 411

<210> 1392
<211> 383
<212> DNA
<213> Homo sapiens

<400> 1392
attcacccat ccacccatct actcatccat ccatccaacc atgcatccat ccatccaccc 60
atccacccat tcatccatcc atccacccaa ccaaccatcc acctttttcat ctatccaccc 120
acttgtccac ccacccattc ctccattcat cattcaaccc tctcttccta ccatcactgt 180
ttcatccatg aagatttata aagaagtgta acatttggag tttataaacc agtatttgag 240
acctaattct aattctttcc gcctgtgcaa tcttggacaa atagttaaaa ctatctacat 300
tttttgttta ttctttggca aaatgggaga gagtgcttat ctttacatta tgaaactact 360
atgagaaaga gatgattcag ctg 383

<210> 1393
<211> 407
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(407)
<223> n = A,T,C or G

<400> 1393
gattcgaatt ccgttgctgt cgagcagcca ccagagattg tcatgaaaaa tgaaaagtca 60
aagaaaaata agaagaaatc atagtcagat gctaaagcag tgcaaaacag ttcacgccat 120
gatggaaagg aagttgatga aggagcctgg gaaactaaaa ttagtcacag agagaaacga 180
cagcagcgta aacgtgataa ggtgctgact gattctggtt cattggattc aactatccct 240
gggatagaaa ataccatcac agttaccacc gagcaactta caaccgcatc atttcctgtt 300
ggttccaaga agaataaagg tgattctcat ctaaatgttc aagttagcaa ctttaaatct 360
ggaaaaggag attctacact tcaggtttct tcaggattga atgaaan 407

<210> 1394
<211> 237
<212> DNA
<213> Homo sapiens

<400> 1394
atttacgtgc catgatttta ttccaaccaa aaagatattt ggaaaatatt taagaattat 60
tgctgattat tgaaatctag aacactaata ccagtgaata ttttgtatac cctaatactt 120
ctctgatcac ttacaagcca ataattagcc attcacgata cagaagacag acagggtaga 180
tgtgggggg cggtttttg ggtaattccg gaaagagaga aaactttggg agggtga 237

<210> 1395
<211> 376
<212> DNA
<213> Homo sapiens

<400> 1395
ctccatatat atatatcaat acattttcta agggttgaaa ctaagttttc actgacattt 60

atataaataa cctaaaatct tggcactagg attatttaca aaggtaaaac ctgaattaca 120
aatatttggc aaggagaaaa ttatactttc tgtctttctt cccaaatcaa aatcatcttc 180
tatggggcgg catccccacc tcagctgtgt gaacggtggc cccagaaaaa ataaggtcaa 240
aaaaaattaa aaaaaaataa tcttctggcc gggagcaatg gctcaatgcc tgtaatccca 300
gcactttggg aggctgaggc gggcggatta cctgaggtca ggagtttgag accagtctgg 360
ccaacatggt gaaacc 376

<210> 1396
<211> 158
<212> DNA
<213> Homo sapiens

<400> 1396
tttttattat ctcctttcta ctttttggc ttacttttg ttcttttttct caccttcctg 60
cttggatgat taattaattt ttattaattc ttttagtcct attttttttc agtgattaag 120
gccatgaatt tttctgtgtg caaactatat cctgagac 158

<210> 1397
<211> 406
<212> DNA
<213> Homo sapiens

<400> 1397
ggcacgagag gaggcaagtc aatcttttttt atttccttat aaaattaact cttcaaaagc 60
tgttaaacag agagttatct taatttttat tgcagtagga ggaaatatat ttaaaatatt 120
tgtagattta tagcaaatag agactcgtta tttaaaggtt aaataacaat ttgttctttt 180
gttgtttttg ccagtttagg gcagtagctg cttttgtcat aaatatcttc ctaccacatc 240
aaaaatgctg cttttaaaat ttttgtttat aaattgagaa ggaatttttct ctctataagt 300
ttctgtcatt gaacagatca ccattaaaaa gaatattaga atccagcatg aagataatgg 360
ctaataaaaa tgaggtacat actttataaa accattaatc agattt 406

<210> 1398
<211> 374
<212> DNA
<213> Homo sapiens

<400> 1398
accaccacgc ttcaattcaa tctaaatcaa ttcaacaaat ctgtgctgaa agtataacat 60
ttagtttttct tagacaccaa atgaacaata caaaatccct caagggactt agaacattca 120
agtttttctat atctgtggtt ctaagtctgt taccaacttc caggactctg cttctttccc 180
tctgcccatt aacaatgcgg tgttaaaagt gacttcctac cactatgttt cttacagctg 240
attcaaccac tcatctcata gccaggcatg aaagaaagga gcataccccct aaccgagaac 300
tatttttttag atggtagtca tatatttatt tcatatttag taagtattat ttcaggtctt 360
attaattaaa ggaa 374

<210> 1399
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1399
cgttgctgtc ggccaattca gggtctcaag aaagaacagc ccacaggatt gacactgaac 60
cttaacaaag ttaacaggac caagctgcag agagggtgct aggacagcga agccaaagag 120
gacccctcaa acccaacaag agctgtgcgg ctccctgatt cctcgccagt gttgctaccg 180
cccttggctc ttcttgcatg gctggctctt gagacccctg gaagctgatg gaggcaacgt 240
gagaagcaca tggacatccg accttgagct tgagaggcag aggcctgagt tctagttaca 300
gccccagcag taccagttgt gtggactggg agggaggcta tcacgtacat actccaagcc 360

tccaagcctg tttccccttc tgacacagga tcttttgtgg ct 402

<210> 1400
<211> 399
<212> DNA
<213> Homo sapiens

<400> 1400
ggcacgagcc ttcgctaccc tgtctgcacg tcccagcacc caggtaccca gcacaggtct 60
ggcgagaggg tagagatggt ggacctcagc cagaagtggg ccccactgca gcccacactt 120
ctctttacag ccgaggccag actcttgggg tgaggacaac tgggagggcc tcgagactga 180
cagtcgtaag tgcttcccct gggtgggctg aagactaggg ctccccgact agcccgcccc 240
tacaggcccc cggcaggcac tggctggaga gctgagaccg gggctccccc tcctgacgcc 300
aggacaggtc aaggctgagc tggcccggaa gaagcgcgag gagcggcggc gggagatgga 360
ggccaaacgc gccgagagga aagtgggcaa gggccccag 399

<210> 1401
<211> 403
<212> DNA
<213> Homo sapiens

<400> 1401
catcattcgc gcggccgcga attcttccga cagcaacggt tccttactaa aagaaataat 60
caggaataaa aaaaagaaat aacattgttg gggagaagag aagggaatta acatttataa 120
tacttttctt gcttatttct agtgttttca aatttcctgt ggagagcaaa atacttctac 180
attaaaaaag cttttattgt ctttgttgaa aataagatac aagaagtaga ctttaatttg 240
aaaaaatata atgtagtgaa ttagattaaa atgtttatgt atgaggaaaa taggcccagc 300
atggtggctc atgcctgtaa tcataacgct ttgggaggcc aaggcaagag gattgcctga 360
gcccaggagt tcaagaccag tctaggcaat gtggcaaaat cct 403

<210> 1402
<211> 377
<212> DNA
<213> Homo sapiens

<400> 1402
aggagacaag ggtacagact gtgagtctag tcagaagtga tgcacatggc tcagtggatt 60
taggcaagtc atttcagtgt ttgtacaatg ggaatagtaa tataatacat acttctgaga 120
attatataaa aaatgtatgt aagatacctg tgatcatttc tctttacccc taactatact 180
ataagtttct gagagagagg gaaaaaaaaa catacctlat acatatcttt atattcctat 240
tggggcttaa atactttgca cagtgtgtga ttaataaata catgtgcata agtgtaagca 300
tgtgtcagca tgtgtgtgtc agcatgtaag tgtgtgtgtg ttcagaagat ttaggtgtct 360
tagaatagag ctgataa 377

<210> 1403
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1403
cgttgctgtc gtagcgcgcg aggccctcgg tcggacggga cgctcgggat tcagggactg 60
cctcggcaca cgggaagttg ccctacaggc gcgggagaaa gcgcaggcgg cggcttagca 120
gggagaggca ggctgcagtg cacattgggt caggcacacg cgaggggcag cccccgaggg 180
ccgtcccaga gtcccccgcg ccgccggggt cctaacgggg tgcaccgtct tccgccgcac 240
gtggattcag cgcgatgccc aaatccaagc gcgacaagaa agtctcctta accaaaactg 300
ccaagaaagg cttggaattg aaacaaaaac tgatagaaga gcttcggaaa tgtgtggaca 360
cctacaagta ccttttcatc ttctctgtgg ccaacatgag ga 402

<210> 1404
<211> 406
<212> DNA
<213> Homo sapiens

<400> 1404
ggcacgagcc tcttcgaagc ccatgttatt gaccgactga agctgctggt gctgtacagg 60
ggagaggatg atgagctgct acagcgggca gctgccgggg gcttggccat gcttacctcc 120
atgcggccca cgctctgcag ccgcattccc caagtgacca cacactggct ggagatcctg 180
caggccctgc ttctgagctc caaccaggag ctgcagcacc ggggtgctgt ggtggtgctg 240
aacatggtgg aggcctcgag ggagattgcc agcaccctga aggagagcga gatgatggag 300
atcttgtcag tgctagctaa aggtgaccac agccctggtc caagggctgc tgcagcctgc 360
ctggacaaag cagaggaata tgggcttatc caacccaccc aagaag 406

<210> 1405
<211> 363
<212> DNA
<213> Homo sapiens

<400> 1405
gcaacaccct tctgatgaca tttcccatta acctcagaac ctattgcaag agtatatacc 60
tctgttaaac aagcagaata tcaaccaaac agcaataaag gaagattagg ttgaaaaagt 120
gcacatcagc ctcccttgga actctgaaat gtagatttta tggaaaaaat aacagctatt 180
tttaaaaaaa taatttttgt ttcgagcaag taaaaaatat ttatctctta gtatattaaa 240
ttacagattg aatatggcat ggttagtctg tgaattctca cagtattata agtttatgaa 300
atagactctt ctcaagaatt aaaatagaag ttctatgggc caggcaaggg ggctcacccc 360
tgg 363

<210> 1406
<211> 370
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(370)
<223> n = A,T,C or G

<400> 1406
ataacaacag taataaggaa aacaatataa caataacaat tctaaaactt catattgtcc 60
atgggtctgt atctctctgt gcttatgcag ccatattgtc aaaaaatata tatgctgtct 120
ctaatttatg catcatatat tttttaaatt atcgtagtta attttgtacc taagaagtaa 180
acctaatcgt taagtttaaa agacaacagc aaaggagatc ttttaaatat tcatttttact 240
ggaactttat tgatcatttg acatttttgc agatttcctc cttgaaatcc ttttatttaa 300
atgatattaa ttattggctt ctttttgatt gctttntaat gactttagat tatattctta 360
agaactttta 370

<210> 1407
<211> 316
<212> DNA
<213> Homo sapiens

<400> 1407
cattggttct accaagcata agcaaatcaa acaactcatt gagagaatgt catcagccaa 60
taaaataaga aactgctccc aggccctgaa tcagcttatt aaaattgacc tctgggacta 120
gcttctccta atacataaaa ttataaaaaa gacttagaca cagaacctca agtctgttct 180

accaggaaat tttacacaag tattccagaa atcaaccaat cattctaacc cattagtggt 240
attcagtaag attgaaagta ttcaataaaa tcagaacaaa atgtctcata caagatttcc 300
tggcagggca tggtgg 316

<210> 1408
<211> 369
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(369)
<223> n = A,T,C or G

<400> 1408
gatatttttc ttctgttttt agtatggcag tatacaaaaa tgtatatatt gatttttttat 60
gataaaaatt tgatcacaca aaattaataa tatttgtacc atcaaattgt cttacttcta 120
ataacagaaa gaagtgtctt ttgaattact agaatacttt tatttttgag cgcttaaaaa 180
ttttttcaac atttatactg aacgcttcat ttgcttattg cattgcatca gctaaaatct 240
ccaaaaatat tgttgaataa tactgaggat ggcagatatc aatctttttc tgacagcaat 300
gaaaattcgg attgcattat aaactatgtt tgctcctagt tntgcggcaa aatgtattta 360
tcaattttc 369

<210> 1409
<211> 398
<212> DNA
<213> Homo sapiens

<400> 1409
cgttgctgtc ggtgcatgcc tgtaatccca gctacttggg aggctgaggc atgaacatcg 60
cttgaacctg ggaggcagag gttgcagtga gccaagattg caccgctgca ctctagccta 120
ggtgacggag tgagattgtg tctccaaaaa aaaaaatttt ttctttgcga ctgtattcct 180
aattttatct acatacataa ttcacttgcc actcttgact gtcttactta ttctgtttgc 240
aaattcatgt catggtttat gtatcacagt gcagtcccat gagtttttta gacaaaggat 300
tagtggataa gccaagagac ctataccctt cactatatag gatgcaggtg tttcaaatgc 360
tggatgtaag tggtaggcat ggtggctcac acctgtag 398

<210> 1410
<211> 371
<212> DNA
<213> Homo sapiens

<400> 1410
aggtagatac cacttttttc acaattacta aaagccaggc aaattactag tattttacat 60
catcataact cattaatccc tcacaaagtc ctataaattt agtaatgaaa ttaaaatccc 120
ctgggagtca gaaacatccc atttgtgaga aatacacttt tcaatttatg ccaaccaaaa 180
gcagaataaa attttaattt atgaatttct aagatgagaa aagtggggct tagcaatgct 240
aactaatatg tgcaagtttg tgcagttata aggaatctga ttcataatca cttttctcca 300
ttgcctccac ggattaaaaa ggtgttccca gccctgcagt ttttcttaca gagctcagtt 360
ccttaactac c 371

<210> 1411
<211> 396
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(396)
<223> n = A,T,C or G

<400> 1411
ggcacgagga tcagtcaagg atgacgtgag ggtttgctgg gagcaccagg aatcctggag 60
aaggtagtgg caagagggtg cagcaagctc agctgggcgg ggatcaagtc tgaggactta 120
atgtctcctc tgatctccag acccataagg gagatgctga gtagacaact ggggcttatg 180
ggtctggagt tcagaggaga gatcgggaag gtgtccattt ggagtcatcc acgcagagat 240
gtgtgaaggc tgctcaatga ttttgaggtt taaagaaaaa aagagatgtg aaaccagggg 300
ccctgatgag gctgcccagg tggtaaggaa gacagaagag aagccatggg acagctgagc 360
ccgggcaccc tcaagccttg gaggcatgaa gtttgn 396

<210> 1412
<211> 396
<212> DNA
<213> Homo sapiens

<400> 1412
cgttgctgtc ggcggtgctg tgtcctgcag gaagagcggg atgcagctcg ggctgggcaa 60
ctgagtgagc atcgagagtt ggagactctt cgggctgccc tagaagaaga acggcagacc 120
tgggcccagc aagagcacca gcttaaggaa cactaccagg cgctgcagga ggagagccag 180
gctcagttgg aaagggagaa ggagaagagc cagagggaag cccaggccgc ctgggagacc 240
cagcaccagt tggcattggt gcagtctgag gtgcggcggc tggaaggaga gctggataca 300
gctcggagag agagagatgc cctgcagctg gaaatgagct tggtgcaggc ccggtatgaa 360
agccagcgga tccagctgga gtcggagctg gctgtg 396

<210> 1413
<211> 395
<212> DNA
<213> Homo sapiens

<400> 1413
cggcggccta cggttgcgag atgacgacag aaggggatta aattcctttg ttcatactca 60
taaatagcac taaagtgtta taacatttcc atttacctat ttttagttcc ttcattttaa 120
cttaataaaa atcttggatt gatattctct gttttttttt ttttttttgg gggaggggag 180
ttgttttttt accccggggg ggatgacggg ggttttttt tggtttcttg gaaaccccca 240
ccccgggtt aacccctttt tcctggttta acctgccaag gggggggaa cgggggcccc 300
ccccccccc ccggggaaat tttttgggct tttaagaaag aaaggggtc tccccttgg 360
tcccaggggg ggtataatct tctgccccct ggaac 395

<210> 1414
<211> 396
<212> DNA
<213> Homo sapiens

<400> 1414
tcgatctgaa gtccgagctg aagcggcgga acttagacat caccggagtc aagaccgtgc 60
tcatctcccg actcaagcag gctattgaag aggaaggagg cgatccagat aatattgaat 120
taactgtttc aactgatact ccaaacaaga aaccaactaa aggcaaaggt aaaaaacatg 180
aagcagatga gttgagtgga gatgcttctg tggaagatga tgcttttatc aaggactgtg 240
aattggagaa tcaagaggca catgagcaag atggaaatga tgaactaaag gactctgaag 300
aatttggtga aaatgaagaa gaaaatgtgc attccaagga gttactctct gcagaagaaa 360
acaagagagc tcatgaatta atagaggcag aaggag 396

<210> 1415
<211> 393

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(393)
<223> n = A,T,C or G

<400> 1415
cgttgctgtc ggacgccggt gcagtctcga accatccctc tgttcatgcg aaacaaagat 60
gtcgctgcag aagcggccac aggtagcggc aaaacactcg cttttgtcat ccccatcctg 120
gaaattcttc tgagacgaga agagaagcta aaaaagagtc aggttggagc cataatcatc 180
acccccactc gagagctggc cattcaaata gacgaggtcc tgtcgcattt cacgaagcac 240
ttccccgagt tcagccagat tctttggatc ggaggcagga atcctggaga agatggtgag 300
aggtttaagc atcaaggtgg gaacatcact gtggccactc caggccgctt ggaggacatg 360
ttccggagga aggccgaagg cttggatctg gcn 393

<210> 1416
<211> 369
<212> DNA
<213> Homo sapiens

<400> 1416
gaaataaatc agcgcttcaa agacaaactt ccagtgccca ttccaatcga attcattatg 60
accgtgattg cagcaggtgt atcctacggc tgtgacttta aaaacaggtt taaagtggct 120
gtggttgggg acatgaatcc tggatttcag ccccctatta cacctgacgt ggagactttc 180
caaaacaccg taggagattg cttcggcatc gcaatggttg catttgcagt ggcctttca 240
gttgccagcg tctattccct caaatacgat tatccacttg atggcaatca ggagttaata 300
gccttgggac tgggtaacat agtctgtgga gtattcagag gatttgctgg gagtactgcc 360
ctctccaag 369

<210> 1417
<211> 358
<212> DNA
<213> Homo sapiens

<400> 1417
ggatttcacc atggtggcca ggctggtctc caactcctgg cctccaatga tcctcctgcc 60
tcagcctccc aaagtgctgg gattataggc atgagccacc gtgcccagct gctaactaga 120
aatgtaaagt gcacagagtg gtagtgctgg taataattct agagtataaa aacaatttaa 180
aatttttgg agaatttgtt tttcagattt gaaaagaaaa ggggaatgat acacatatct 240
gcttaaaaca atgatacagg aaaggttttt tttaaaacag gctaaaaatt ttgccttcct 300
ttctaattct aaagatgatg gaaatgaaga ccattatgtg ggccagggcg gtgggtca 358

<210> 1418
<211> 175
<212> DNA
<213> Homo sapiens

<400> 1418
cactgctttg taagactttt cttatttttt catatgtaca tttgactttt ccagctaggc 60
tgtaagttcc ctaagggcag ggtgcatatt ttccatatgt tttggcacct atactaagcc 120
tgggtatata gtaagcaatt aataatattt gttaaggctg ggtgtggtgg cttat 175

<210> 1419
<211> 172
<212> DNA

<213> Homo sapiens

<400> 1419
tgtgtcatgg gaagaagttg aagggtttca gttagggaga gtcataataa aggttgcagt 60
ttaacaatgt cattcttgag gaataccagg taaacttaca gatcagacac ttaatttatt 120
tctacttgct ccgaaaactc cactgacatg agcatagaga gtcaaataaa gg 172

<210> 1420
<211> 172
<212> DNA
<213> Homo sapiens

<400> 1420
ggaacctgaa atgagaaaag ggtagtgaag gaagacttga tgtccttcat aactggcctg 60
catcctgccc agcccctcct ttctttccag aagcccacca gtggcccaga gtggaagggt 120
gggagtcaga ccagtccaag gttgctaatt aagactggac tgccaggcac gg 172

<210> 1421
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1421
cgttgctgtc gtggagtgac agtttccgcc cacccctcag cagtgcctgg gctcacctct 60
ccacccacct ccccacacag ccagaggcag gccctcagcc gcaatcagta acattcagtg 120
aggacatgtg tttatcatgt gttgtgggtg ggtgcagtga gttctctatt caggtaggag 180
tggaagctgg ctcagggctc atccagtcca atgtcccaca ggtatagaag tgccctgata 240
aaatctcaga gctggctgtc cagtcaagat ttgcatacct ccagaaatgg ggctcttact 300
acccctcaca gtagcccatt ctactgttgg gcacctccaa tggtcagcat tttctttccg 360
gcagcctctt tcttgggctg gggggg 386

<210> 1422
<211> 278
<212> DNA
<213> Homo sapiens

<400> 1422
gaaatatcag cctaaacgta gtttatgttt aggaagcaac aaccgtaaat agtcccacat 60
ccaaacggag tggatttagg tttcactttt tcaaggaaaa accatcaaag aatttttcca 120
catacttata aaccatccca cgtatagaat ccatttttac tgacacaaat ttagtaccaa 180
taaacgactc ttcttctcaa tttgttttat ttaacaataa gtcttgaacg tcattcccag 240
ttaacatttt gaagagtttc ctctctttcg ttctgttt 278

<210> 1423
<211> 385
<212> DNA
<213> Homo sapiens

<400> 1423
cgttgctgtc gctggaaagt gggataatac tttttacctc atggacttgt caggaggatt 60
cattaaaacg actcgcataa agcctatgcc acatggtaga tgccaattca gggtctcaag 120
aaagaacagc ccacaggatt gacactgaac cttaacaaag ttaacaggac caagctgcag 180
agagggtgct aggacagcga agccaaagag gacccctcaa acccaacaag agctgtgcgg 240
ctccctgatt cctcgccagt gttgctaccg cccttggctc ttcttgcatg gctggctctt 300
gagacccctg gaagctgatg gaggcaacgt gagaagcaca tggacatccg accttgagct 360
tgagaggcag aggcctgagt tctaa 385

<210> 1424
<211> 363
<212> DNA
<213> Homo sapiens

<400> 1424
ggtttgaaaa gtctgttcta atttcattcc gatgtgactt agagaaaaat actccccogt 60
gcctcatgcc cacactctgg gcagtgccac ccgcagctcg gcaattgcca ccttccttgc 120
tgtggtttcc cagccttggg ccctgcccag acattggtct gaggctgcct ggtgctcttc 180
cccaccaccc tgggggccca ggtttctctt ccccctgcag atccagaggc gtaaaactac 240
atttggtaac ctggtttgtc atgaaagtgg acatttgact ttttcttaaa aatgtttggg 300
ttatggctgg gtgcggcggc tcacgcctgt aatcccagca ctttgggagg ctgaggcagg 360
cgg 363

<210> 1425
<211> 359
<212> DNA
<213> Homo sapiens

<400> 1425
tataaccatt tctcctcaca attatactag agaacttagc caagctaatc acaaaataac 60
aagaaattgt aggttataaa atggaataag gaaataaaac tggcattact tgcagagaaa 120
atgactacat gttttgagaa ccccaaaatc tgcagataaa ctgttagaat tgacaaggct 180
atttagcttc ctatgaagtt gatatacaaa tatcaattgt ttgttaacat aagagcaata 240
aagaaacaaa gtgaaaatta ttaaaaggca ccattcacaa cattatacac aaaatcaaat 300
aattgtaaca atgtaagaaa tcaacagaca catacacaaa aaataattat taagataag 359

<210> 1426
<211> 332
<212> DNA
<213> Homo sapiens

<400> 1426
tccatagcgc ccatggctcc accaccagtc aaaggtagtg gggccagcag tggactcctg 60
tgtggttcag ctctcaaaaa tgtgaactga aagacacaga aaaagacttg tgtttgggga 120
taaatactga gactgagcag tcttgtggat tcaggaattg ggcatccagt tgggacccct 180
tgcaagaagg gtgttaggga gcacagagca tgagtaagcc ggaagcagag caggagagag 240
aatggagcat gtgtgcaaag agggcggtga gatgctgaga gtaatggggc tggcccaaga 300
tgaagtgaga ggaagcaaag tgagacagag gg 332

<210> 1427
<211> 330
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(330)
<223> n = A,T,C or G

<400> 1427
caaagcttac tactcttagt gaatttgagc tttcctccct tctcaacgct tatggtttgt 60
ataagtacca tgaagagtca tgggaatttt gttcctttta tttatgagat atatattcaa 120
tatatattca tcttgcacat gtatatacat cctacttgca gatttaacct tgacttgaaa 180
tttgaaatat ttaggaagaa gaaaggaaac gtcaagagga aatagaacgc cagcgtcgag 240
aaagaagata tattttgcct gatgaaccgg ccatcattgg acattcaaat tggggctgca 300
aaaaagggcc cggtatgaac tgaaacatcn 330

<210> 1428
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1428
cgttgctgtc gaccggagtc aagaccgtgc tcatctcccg actcaagcag gctattgaag 60
aggaaggagg cgatccagat aatattgaat taactgtttc aactgatact ccaaacaaga 120
aaccaactaa aggcaaaggt aaaaaacatg aagcagatga gttgagtgga gatgcttctg 180
tggaagatga tgcttttatc aaggactgtg aattggagaa tcaagaggca catgagcaag 240
atggaaatga tgaactaaag gactctgaag aatttggtga aaatgaagaa gaaaatgtgc 300
attccaagga gttactctct gcagaagaaa acaagagagc tcatgaatta atagaggcag 360
aaggaataga agatatagaa aaagag 386

<210> 1429
<211> 387
<212> DNA
<213> Homo sapiens

<400> 1429
cgttgctgtc ggagatcctg tgtacaacag caattggagc tctaaaatta aacatcgggg 60
acctacaggt tacaaaggaa acaattgaag atgttgaaga aatgctcaac aaccttcctg 120
gtgtgacatc ggttcacagt cgtttctatg atctctccag taaatactat caaacaatcg 180
gaaaccacgc gtcctactac aaagatgctc tgcggttttt gggctgtgtt gacatcaagg 240
atctaccagt gtctgagcag caggagagag ccttcacgct ggggctagca ggacttctcg 300
gcgagggagt ttttaacttt ggagaactcc tcatgcaccc tgtgctggag tccctgagga 360
atactgaccg gcagtggctg attgact 387

<210> 1430
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1430
gttgagaagc tgggaatggt ggtggaacct aaaagacttc caactctgag gaaattgtgg 60
tagaaatgga agcagtataa cctatgattg aacttaaccg atgtaggtga ttgagattgt 120
atttgcagag acaatgctta aagaaataaa agaaacccag acataaaaac tgaagcttta 180
atggagatac ataaatacat aggaccttgg aaaacaaatg aagtaatata actgcatata 240
atttgtttac atatataaaa cataggaaaa tggaaataca gtgtattctt aagtgtacat 300
ttgtgtgtgc gaaatttatt gagtgctttt actttacata aaccgcggaa ag 352

<210> 1431
<211> 350
<212> DNA
<213> Homo sapiens

<400> 1431
aagtcggcag agcaaggact tgaagtaagc tggaggtaag ctggagtgtg aagtgtgaaa 60
tgaactgtat gtgcccctg caagggtgag cagccacagt gccagctgat gttaccttgt 120
cagaatgtag cttcagtatt gctatggctt tgtttttctt tcaacttgca aatgctgata 180
actaatacaa aatttaaac tgttgtctgc aaacatagtc ttggtccaaa agctccttca 240
gctgataagc aacttcagca aagtctcagg atataaaatc aatgtgcaaa aataagtagc 300
attcctacac accaacaaca gtcaagttga gagccaaatc aggaatgcaa 350

<210> 1432
<211> 351

<212> DNA
<213> Homo sapiens

<400> 1432
ttaatgttca aacaacccat agagtggcta tcattactca gattttatct tagagaaatc 60
aaagctctaa taattcaggc tacttttgaa aatttattca tcttcttatg actagaaaca 120
aatatttcaa gcccaaaaga taaagattta aagtaaaaga agtcttaaag aagaggcagc 180
acaatacagt gctgtagtaa ccttttgtga gcatcagact caccagtgga gctttctgaa 240
aatcacatgc ccagctctca caacttgggg agactgtgat tcattagatc tggagtgatg 300
tcctgcgtat actgatgtag tgaaaagaat atgagctttg cattcccagt t 351

<210> 1433
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1433
atgtggaaat tacaaatgca tcaaagtatt ctaactagtg tttagaaatc taaaaatgaa 60
aatattttgc aattatgaag caaagatgac tgacttcaac aaaattgcat gctttcaaag 120
ttcacaaaag tatcaagttt tgactatgca aatgcaagaa gcactaagag taacgataag 180
ctagcaccta tcagagaggt atttcaaact atttacagct aacaccagtc taatctttaa 240
aaaaattaaa tataggtcag tcatggtgac tcacacctgt aatcccagca cttcatgagc 300
ccaaggcagg aggatcactt gagcccatga gttcaagacc agcctgggca a 351

<210> 1434
<211> 378
<212> DNA
<213> Homo sapiens

<400> 1434
cgttgctgtc gggaactgcg ggtgtgtgtg tgtatgtgtg tgtgtatgtg tgtgcgcgcg 60
tgcgtgcgtg tgtgtgcgcg cgctagtgtg tggacaagga ggtgggggca gctgagttag 120
agtcccaact cttggactcc atttgctatt ctcttctttc tcccccacac ctatctggtg 180
gtggtagtgg gcgtttatat ttgcgttcct tttcattcat ttctaaatct cttaaaaatt 240
ttgggttggg ggtattgggg aaggcaggaa agggaaaagg agagtagtag ctgaagagca 300
agaggaggac atggagatga agaagaagat taacctggag ttaaggaaca gatcccccgg 360
ggaggtgaca gaggtagt 378

<210> 1435
<211> 357
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 1435
cgggtaatat ttttagtaga tacagggttt tgccatgctg cctaagctgg tctcaaactc 60
ctggactcaa gcaatccacc tgccccagcc tcccaaagtg ctggggatac aggcatgagc 120
cactgagccc ggccttaaga catttttctt acgagggatt ttttagccct gagggaaatt 180
tatcatgaaa gcaatagagt tcagagcaag aactctggaa tcagagctca gatttgattc 240
tggataaaac ctgaagagtt atataacctt ggagaagcta actgccattt tgaaccatag 300
tttcctcacg tgtgaaatgg gtttcatgtt aatatatata actcatggat tataggn 357

<210> 1436

<211> 351
<212> DNA
<213> Homo sapiens

<400> 1436
tattcaattt cctctgttaa tggttcctca agcataatct gagacctccc ccccacccgc 60
caacagggcc tggagatcat aactattttt attataatgt ttatgcattt ttgtcttttt 120
cattgtgctg acatttgtga agaggaaaac ggctggttcc ttaccacgag tcaaaggcat 180
agcagaaaat tgttttacta gtcatggtat ttttttttt ttttttactac tatccactca 240
caaaaaaaaa aaattttagt tccactgaaa aatacttttg gggaacaccc aaaaattttt 300
atttttatta aatcttgccc ctggggcact ttaaaaaaat aaatttttg g 351

<210> 1437
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1437
gaataaatgt gttgaaattt gtctttattc acgagatcat tagaggctaa gtcatggcaa 60
cacgtgtagt tcaattcaat ttttttttgtg taaaattttg ttgagctgca tccatccgca 120
tatgtaacac taatttggta acagcttctt tatactaagc cagaattaat ttgtcctcat 180
ggttttgttt taaatgtgtg agctgtatta tatcacattt gaacaagtaa tatagagaat 240
ataaatttag tttagagaaa gaaaagtaca ggcacactaa aaatgaatta ggatctggca 300
gctgacactg attaacaggt tgagcaaatt caactagacc taaatctctg tg 352

<210> 1438
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1438
acccagtatg taaataccac ttcccactac aataaaagag ggctcttctg agacaagttt 60
aattccagat ctagggaaga caatgtataa ggtgaggcag taaaatcatg tcttactaga 120
gaaaaacgat taagtgaaaa ggacaaaaac cactgggatt aagtgaaaag gacaaatacg 180
aaggaagatg ctcctactgg cccaaaatgg atcttttaat catcaataag aactgattaa 240
agttgattat agattaaaaa ataaaatcca ctggtaacca tggaaagata agggtgaagt 300
ttcatttatt tgtacaagga ataaatggat ggcagaatta gaatatcact ggt 353

<210> 1439
<211> 350
<212> DNA
<213> Homo sapiens

<400> 1439
ataatcaaat agcccagaac tggggccaag ccaattctcg tcattgacaa catattcggg 60
attgtccatg ggttttcata ctgaaacaca aagacaacaa aatttaagta aaatactatg 120
aattcatact ttgaataact atatacatac attagaaaaa tatacttcat caacttcagt 180
cagaagctac ataaacttta aatttagcac attaaattga attttaaaat ccattctgtt 240
ctttttacag atatctccct aaaatcttct ttcaagaata cagaagatgg ctgggcatga 300
tggctcacgc ctataatccc tgcactttca gaggctgagg cgggatgaac 350

<210> 1440
<211> 350
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(350)
<223> n = A,T,C or G

<400> 1440
gacagggctg aagaacacag gtcgctgcat ttagaaagga ggcggggtca gaggaatana 60
aagggacagg gctgaagaac acaggtcgct gcatttagaa cggaggcggg gtcaaaggaa 120
tagaaaggga caggactgaa gaacagaggt cgctgcattt agaaaggagg cggggtcaga 180
ggaatagaat gggtcagggc tgaagaacac aggtcgctgc atttagaaag gaggcggagt 240
cacaggaata taaagggaca gggctgaaaa acacaggtcg ctgcatttaa aaaggacgcg 300
gggacagagg aatagaaagg gacagggctg aagaacacag gtcgctgcat 350

<210> 1441
<211> 380
<212> DNA
<213> Homo sapiens

<400> 1441
cgttgctgtc gacctgtttt ttctttttct ctcaacagct tatttcattt tttttttta 60
attaaaagtt tacttttaca tgttttgaat gttggaatat tggcttatat ggggacttt 120
tggttttatt aaggtttgcc aaattaataa caattttctt atttttaaag ggtctatcca 180
tgttagttca gctatcactg aagaccaaaa gaaaagtgaa aaagggcgac cgaacattgc 240
aaaaattgaa gacatcaaag ttttacaaga aaataatgaa ggactgagag catttttact 300
cactattgag aatgaactta aaaatgaaaa ggaagaaaaa gccgaattaa ataaacagat 360
tgttcatttt cagcaggaac 380

<210> 1442
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1442
gtgccccacg aacgaaagtg tcttcccatc agtccctgca ctgggaccgg ggatcctggt 60
gtcccttgtt cgagctcagg gtgtgcctca gccgctaagt gaaccccaag gggggctttg 120
ggcgcacaaa gcccatgagg ggaaggtgag ttttgagggg agaggtgagg cacctgtcac 180
agaaaaagaa agaaaaaacc cgcgccgtgg agaggtgggg cctgggtccc ccacggatga 240
aagtgccttc ccatcagccc ctgtgctggg taccggggaa cctggggttc ctggtttgag 300
ctcatggaga gccttgggcc actaagggta ccccaacgcg gtggaaagcc catgg 355

<210> 1443
<211> 381
<212> DNA
<213> Homo sapiens

<400> 1443
ggcacgaggg gaagtgtgat gacgtcttgc ggctcctcat ggccgagctg ggcttggaga 60
tccccgccta tagcaggtgg caggatccca ttttctcact ggcgactccc ctgcgtgctg 120
gtgaagaagg cagccacagt cggaagtcgc tgtgcagaag cagagaggag gccccgcctg 180
gggaccgggg tgcaccgctt agctcggccc ccatcctagg gggctggttt ggcaggggct 240
gcacaaaacg cacaaaaagg aagaaagtga cgtaatcacg tgctcgatga agaacagttg 300
gcactttgca gatggccagt gtcacggtga aggctgggtt gcccccacgg gtctagggag 360
aacgaactct ttggggatga c 381

<210> 1444
<211> 347
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(347)
<223> n = A,T,C or G

<400> 1444
atagtctgtc acttaccatt gtttctgcaa gccaagggca ttttttatga ttttacagtt 60
acctaattta tagtttataa tataggaaag ttcatttatt ctctaactat atgagcctta 120
aatatcttgg agatttttcc tatgatttgc cccagaaatt aaaagcaatt caggggggaat 180
gaagaatgaa atagagaaat aaaggaagtc tgaaaattca gaaaataaaa gtatagtttg 240
ggcaaagcaa ctctaacaat attatcatga gctatctatc tttttcaata acaataataa 300
ctcatggtaa agctctattt ttttctcata aggctacttt gaaatgn 347

<210> 1445
<211> 343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(343)
<223> n = A,T,C or G

<400> 1445
gaaccaatct tgaataggga agtgatgcta caaaaatgct aaaaaatgaa ttaatataat 60
gcaaatgtca gtttagtaaa tataaataat gatgcttatc tatatggaaa gaaggcaaaa 120
tataaatagg tagtctattc atagatatta cattgatcca ggtattaaga acatgaaatc 180
attaggctct attaaaagaa aaattcattg taattcatac ttatttttcta atcacttgta 240
atagaatttt taatagtcta tttttcagaa caattttagg ctcacagcaa atacaataga 300
attttagtta tacaattcat acatgaatac tatttccttg atn 343

<210> 1446
<211> 342
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(342)
<223> n = A,T,C or G

<400> 1446
tgatgaatta tgaaggaagg acatttattt tgagaatcat gagcattata atatttattg 60
aggattagaa ttttgttatg tggaggtgct actacctcct catgagccac ttctgcactc 120
aatctcagta agaagaaaat gattaatttg taaaatatta aattatcatg attttttcac 180
ttttctgtcg gtttttttctg ttaatgtcag gtagcttatc tttagtcttt atgattaaaa 240
atgggagaaa gatatcatat taaaaatgca gaggctgggc acggtggctc acacgtgtaa 300
tcccagcttt gggaggccga ggtgggcaga tcacctgagg tn 342

<210> 1447
<211> 350
<212> DNA
<213> Homo sapiens

<400> 1447
caagcatgag acacacatct ggcagcttaa catttaaatt acgaggggga aaccctcact 60

tcagtagtaa ttttctcaaa gaaaagaata gggaatggat tacaactaaa tttaatttct 120
ttttaaattt tcatcttgtc taattgcagg cattttttctg ggttctttgt attcatatat 180
tttcacacat attttctgta gattttattc atctttaatt tgagatgctt ctcactatta 240
gagctcttga aaaattgtgg tatattttac atagaaaatt atctcgagac atctatctga 300
tctcaagtaa tatagacatg gcatagaaaa tacaaggaac atggttttct 350

<210> 1448
<211> 345
<212> DNA
<213> Homo sapiens

<400> 1448
ccatcaagca ttttgagcaa agccaaaaat attatgaaga aaataaaaga atgaataact 60
atcagaataa gaatgtgtgg agatctgact aaataatatc tctgttttat tatagaagga 120
aatgtaaatt tatgtggaag agtgctttaa actgtaggaa taggacttcc aagaaggtat 180
attttggcac agttgccaag ttcatgacaa tcaagtaggt cgccttggaa taaatgaagg 240
aaagaaagct ctctgccaat ctgcaatcgc acccccttact cctactgaac tggcacatat 300
actcacagat attgctagat tttagggtac tgagggacat tgatt 345

<210> 1449
<211> 347
<212> DNA
<213> Homo sapiens

<400> 1449
agattgaaaa ctaacatatc aaatataaac cacataacca taaatgtttt attttacgtt 60
caactactgt tttctgtttg gtgaggaaac aaaagtcagg gcaagagggt gccaataagg 120
agaaagcaga agggacaaga aattggaggc ttctgtaaca aagaacaact agaatgtgaa 180
tagagaaatg aataaatacc gaagaaagat cgacttggct ctttgaagag gcccctggat 240
taaggccgtg gaagagatcg agtactggaa gattgtcgtc acaacggaga attgattgtc 300
ataaaagacg acgctagttg ctgcaagtca tacatgtcac tggctgg 347

<210> 1450
<211> 371
<212> DNA
<213> Homo sapiens

<400> 1450
tacggttgcg agatgacaac agacgggcaa gcataagtac gctgaagggg catctgacaa 60
ggctattgat gtcctcatag aaaggaataa gcatactggg acacactttt agcccttatg 120
acttgctgcc tggaatgtgt ccatgacgcc tggagatgca ggagcgtgaa gatgcacagc 180
aagcagggag agaagctggg tctttgacca ctatcttgag cagctgtgcc agccccaggc 240
tgcatccact tcttgttatt gggaaggaca aagccctatt tacagacaag tctctattcc 300
atgcagctta atgcaatcct gactcataaa gtacctccaa accaccgctc cccagttgtt 360
ccatgtcagg t 371

<210> 1451
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1451
tagttaaata taaatgggta attaactttc caaaaagaat aaaacagtca atctctctgc 60
acacacacac aagatgcttt tcttaatttt ttctgtgaat gacttgactt gatatttagg 120
ttttaatttt cttgaacaac ttaggtgttg caaaaataaa aactgttgta ataaaagttt 180
tatggcttgg agagtcctac ttttcacagc aaagctgagg gagaacggaa aacacatagc 240
tttgatggga ttcttcataa aatagcttgt tttttgtgct gctgaaaata gtattgatgg 300

cttggagatg tcacaaa 317

<210> 1452
<211> 315
<212> DNA
<213> Homo sapiens

<400> 1452
gtgtatcaca tatctagact tcttgatgga atattgaatt tgaatactta tactatacca 60
acatctcact aaattaacta atgaatactg aattttagaa tgcgttactt gatttactgt 120
attatcagta agtagcccta atttatgtac agaaatttaa atgtatgaat tttaatcaca 180
tttatatcac tttatgaaca cttaaaagta cattcatgac ccaccagtgg gccacaaatg 240
ctactttgat ctacattgag tttgttacat acatatcctt gaaccctata atggattcca 300
tttagtctta ccggg 315

<210> 1453
<211> 293
<212> DNA
<213> Homo sapiens

<400> 1453
aaaaaaagct taatagtcat aatatatatg ggatttttac aaaagaaaaa caccaaaata 60
gaaacatgta taaaggaaat taaaaggaaa tcaccaaaga caaaataaga aacccctcaa 120
aaaacagcaa attaaaatga gacatttttg ggttgggcgt ggtggctcac gcctgaaatc 180
ccagcacttt ggcaggccga agtggctaga tcccttgagg ccaggtgttt gggacgagcc 240
tggccaatat ggcgaaaccc ctctttacta aaaatacaaa tattagccag tgg 293

<210> 1454
<211> 343
<212> DNA
<213> Homo sapiens

<400> 1454
atatataaac tacaatcaga gcactgttct gtaattacag gcttttacat ctctctctct 60
cctctagaac aattctctct ttcaggatag gaactgtaac ttattagcag ttacatcatc 120
agagctagca gagtctggtg aattgtaggc attaaatatg ttttggttga ataaatgaat 180
gaaatataca ttccattcct accccaaacc agtataattt tcttacacct ctattactca 240
acttcctcac aaggtctgcc agtcaagagt cttagcagcc acaacagctc cttcaagtta 300
ggatcatttg aggagagtaa agtgatgact taaaaaggta tgg 343

<210> 1455
<211> 375
<212> DNA
<213> Homo sapiens

<400> 1455
cgttgctgtc ggaaatggta aatgatgtac aagaattgcc agaagagtca aaactgcatt 60
attaataatt gtgaaaaatt acaagcaaaa cagctcaaat tcatggaaga ttaataaata 120
ggaggtggga tagttatgta ataaattatt ataccgaaac ttaaatagat gaattagagc 180
ctcatgagtc aaccaggata aatttttaa aagttcagag taataaataa ggcgcaggct 240
tacatttata atataatatc tgaaaactta aatactaaat acttatccaa cataggtaat 300
aatagttcaa acatgcatgg aatggaaaaa caaattcagg gtagtggtaa tctctgggaa 360
ggaatgagtg aattt 375

<210> 1456
<211> 343
<212> DNA

<213> Homo sapiens

<400> 1456
agggtggagc ctgccctcct ccacctgaca cccccaacca ggcctggggc tcggtgtctc 60
cagctccaag tcttcccctc tccaacagcc acttaaaggc ctccctctgg ctctttctcag 120
agaagaaaat caaaagaagg agagagggag gaaaggcagt agttcagggc atggattcaa 180
atctgcatgt aggagatgga aaagcaaggt aggagatggg cagagacaca ggaagagcag 240
gagatgtagg gtgtggcctt agcacttgct gggaggtagg ggtgggacaa ctgagtgagg 300
agctggctta gagagcagac tgtggagttt agtcctgatg gtg 343

<210> 1457
<211> 363
<212> DNA
<213> Homo sapiens

<400> 1457
tctacacttg gattaagaca agacaagaga cttcgatgtg acatgacgca ccacattagg 60
atagcggagt aaaggatgct tgatatgaga cagtggctat gctatagtgt tattctaatc 120
caataggagc tgaagcagac ccttttgaaa catcctgtgc gatagtttta tgattgacgg 180
acatgaggcg cagtgggaag tttttttctt tcctaaaaac agattgagag agtctcaatc 240
tcaagggcca gttaagaaac tcatgggtga gcctgtaatc ccagcacttt gggaggctga 300
ggcaggcaga tcacttgagg tcaggaaatc aagaccagcc tggccaacat ggtgaaacct 360
tgt 363

<210> 1458
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1458
aggctttcag aaataaccaa gaacatcaaa aataaagagg acttttacaa gtgaaaaatg 60
cagtaatcaa aaatgaactc aaaagagaga ttaaatagat tagacacaac tgaagagaaa 120
cttagtaagt gagaagctct atcagaagaa attatgccta atacatggag acaaagaaat 180
ggaaaatatt caagaggagt taggaaacgt gtaggaaaga atgaacagct ttaatgtatg 240
ttgaattgat atgcaagaaa taggaaatgc aggcccggtg caatggctca tgcctgtaat 300
tctagcactt tgggaagctg aggtgggtgg atcac 335

<210> 1459
<211> 340
<212> DNA
<213> Homo sapiens

<400> 1459
cattcatcaa tgagtagaag taaatacatt atagttgatt ttgctaaatc ttaatttaaa 60
agcctcattt tcctagaaat ctaattattc agttattcat gacaatattt ttttaaaagt 120
aagaaattct gagttgtctt cttggagctg taggtcttga agcagcaacg tctttcaggg 180
gttggagaca gaaacccatt ctccaatctc agtagttttt tcgaaaggct gtgatcattt 240
attgatcgtg atatgacttg ttactagggt actgacaaaa tgtctaaggc ctttacagaa 300
acatttttag taatgaggat gagaacttct tcaaatagca 340

<210> 1460
<211> 258
<212> DNA
<213> Homo sapiens

<400> 1460
cacaaattgc tctttgctta aagatcttct tttgttttgt ttaacttttc tagtgcattg 60

tatatcttgt ctaaattaaa tccaattacg ttaacaacat ttaataaaca ttttcctcct 120
gtgttcaaaa gtgattttgt ttatacttca tcagggcgtt cagtggttgg gcagatcaag 180
aatactatat ttaggccagg cacggtggcc tgtaatccca gcactttggg gggccaaggc 240
aggcgaatca cttgaagc 258

<210> 1461
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1461
atttaaagaa atgaagatat gtccctattt ctgtactgta taatttcaat tgtttttcgc 60
ttgctctaaa gttcttatca tcaataatta tgtaacacta ttatatactc actatgacac 120
ttttaagaat ggaaaaacta ttcttaggca tattttattt ttaaaaactt cttaactata 180
taatagaaga gcagagattt ttgcttcttt tttaaacatt tactggctga atatttttca 240
atgacactta ctatttgtat aagtttcaaa ccagatttga ttccaggcca ccagaatgaa 300
atcattacct gagtcaacag gattacctat aggcccg 337

<210> 1462
<211> 340
<212> DNA
<213> Homo sapiens

<400> 1462
cgggggcagc aacaagggcc aacagccctg gtgctggtca gagatccaca aaactgtcac 60
cttcactaac tggtatgtgg tgatgttgga acctcaaagc actcaatgtc tccttttctt 120
ccagaaaggg ccaaaatgac ctcctaatga cagatttcct atcaagggca tattcctggt 180
ccctaatata aaaaatcaag agttatttca attattcacc ccccaccttc cctgaatatt 240
ccagatgtca ctaaggaaag tctaagatgt ggaacttttg ctgcaactta ctggaaacat 300
tcgtccgtta ctcacttaaa ttattcaagc aaattagggg 340

<210> 1463
<211> 339
<212> DNA
<213> Homo sapiens

<400> 1463
aacactaata tttatatgta ataagtctaa aaaatagaca ccaacagcca gaaactgagt 60
agaacatcaa atctaatgaa agacaaagac ttcaaggtat aagaacagat taagtgcagg 120
ctgaatccaa aatggactat ataaactagg aagcaaggta taagatacta ttcttagatt 180
cacaggaact gaaataaaac atctaactct caacttataa ttcatatagc actaaactag 240
gttctaatgt ttttattcct ataaaaaact gtgttcaaac aaaactcatt attgttgatg 300
ggaacaacaa ctgtgcctta cagctcaaac ttatgtaag 339

<210> 1464
<211> 339
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(339)
<223> n = A,T,C or G

<400> 1464
cctcctttgt tactagtttg gagcagatcc ttgcagacgt tttcctctgc attcacatgc 60
atgcaaatgt acttctgaat gcgcacgtat gtctttatat acagatagct tttaacaaat 120

agcaggtggg gccggcactg tggctcacac ctgtaattcc aggactttgg gaggctgagg 180
cgggggatc acttgaggcc agaagttgga gaccagcctg gccaacatgg tgaaacacca 240
tctctactaa aaatacaaaa attanctggg cgtggtggcg ggtgtctgta gtcccagcta 300
ctcaagaggc tgatgcagga aaatcgcttg aacccaagg 339

<210> 1465
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1465
ctgacttctc taccctgctc atattttccc ccaacccatc cctcttccca ccttttagtt 60
tttgaatccg actaaaggaa ctgaattcca agagtccaat aaattaaaga aaaaaaagtc 120
atacaatccc tacatccagg aaataccaat gtaatattat gggctttttt ttggtatgcg 180
tttaagaaaa tactatttac ataaaaagtt aaatatccaa tgttttgctt ttaacttaat 240
gtcattaaat taaataaaca ctaagtttac acatttattt aaaagtacca aggtactttt 300
aatgaatata agataattta cttgactact gctttaa 337

<210> 1466
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1466
aaatcctata tttctggttt cggacatttt ggctattaaa caggaatact ccaaactatc 60
tctttcaaac caattatttt tcaattttat aaatcttcca aataagcaaa agcaaccaca 120
accataagaa caaagaatat ggctacattt atatagtatg ttctttttca aataatttgt 180
aaaggcaaat ttgaaagctc tagttgttta cacgttatca gtgatgagat aaaaatgtta 240
gcataaaaat ttggaaagca ttaaatataa taggaattag agattgatta tgtcaatctg 300
atcagtaaat catgctgatt tactgaaaac aaattaca 338

<210> 1467
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1467
tgacctttg atcccaccat gggactgttc cccagcccta agcccctgaa atgggggaa 60
agagaaccct cctttccttg tgcccactct atgatctttt gaacatgggt tacctccctt 120
cgcggctttt ggaacataag gcaagcacaa gctcttgagt ctctagtttc tgctgtcatc 180
tactcttcct gcctctggca cctcccagct cctgacttcc tcctgcttac ccctggagcc 240
agagacgtgg ctgggaagag cccctggcct ttgaagccag aggtggtggt gaccaggggc 300
aacaggccac tgtgctcctg gatgcgtggt ctgccag 337

<210> 1468
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1468
tataacagaa cacattttga agcacaaagt gacaggaagt tcggcaggtt tctcaggcct 60
catttttgag gtatcctctt ggttttgggg cctcatctgg cattgcttgc tcaggccagg 120
cccagcaagc ggggtgtagg gcagggcaca cactggctac gggggtctct gcagcaggac 180
agagggggct ccctactttt atttttcctg gggggctcct tgactgcttt ggcaagctga 240
tactcggcgt tatctggtgt gttttataat ttttttttagg atgtgtgtgt tcttcccttg 300
gagggggtgc cgtctttaat ttttctgcgg gggggttt 338

<210> 1469
<211> 329
<212> DNA
<213> Homo sapiens

<400> 1469
gaagaatgag gatcaaaagg taaaatactt tataaattaa ttttttcttt ccttatcctc 60
cgtgactgct ataaagactg tgaaaggtga aggctaatgg agtagaactt ccttacatcc 120
acaatgtatg ggatctactg tagtctacac agttgacagt gtaacataag ccttactaga 180
tcagttcatt attataattc tatggccacc atctgtccct actcatagta agtttacaga 240
gacgataaaa gatctaattt cagttctacc gatcccattg gctttataaa cccttaactg 300
aagcttagca aaaggattag tagaaaacg 329

<210> 1470
<211> 332
<212> DNA
<213> Homo sapiens

<400> 1470
ggcagccttc atgacccaca tgtgaatgtg tcttatatca aatattatgt ttaatttaat 60
tatgtgcaat tgaggtagaa taaaagaaga aaaaaaagac taggacaagt ggaaaagaaa 120
gagtagcaca gtacatttac agcagttgga aattatacat tttgcataag aggtaatcag 180
gatatagact aagcagcact tacaaagata ttccaaacaa aactaatgtg caaacaaaat 240
agaaggtatc tctaccactt tctctcattc atttaatagt ttagttatca tccaataaaa 300
atttaagaca cggccgggcg cggtggctca tg 332

<210> 1471
<211> 302
<212> DNA
<213> Homo sapiens

<400> 1471
acccacctca gcctcccagc gtgctgggat tccaggtgtg agccactgca cccagccagg 60
tgtgattttt aggcggaatc ttaacacagt attgaaagat ttcttcaaac cagaagaaaa 120
gcaggtatct gaaacatttt agtgctggcc acagagttgg agatgaacag ggaagctgag 180
gatcggcccg acggctggca gcaaatgaga ggagacccga gcgccaaaca ttgacatgac 240
ttctgttggt catgcggcct cttggaaaat gtttttccat gaactgttgt ttagaaatgt 300
ct 302

<210> 1472
<211> 331
<212> DNA
<213> Homo sapiens

<400> 1472
gagccaccgt gcctggcctc accattgtta aaattatgga aatcgtgttt gcaaagcagg 60
ttggcctgtt tggaaaaggg tgtcataatt tctcaggtaa ctccaaaaag agaaagctac 120
gaaaattacc ttaatacatt cattacagtc tcagtataag attatagctt cctctcccaa 180
agcgtaacca caacctgacg caggatgagt tggtttgaaa ataccgcata caatatcctc 240
ttgagtagaa tcataattta gaactctaaa aatgaccgga aacaaaactg tccaagtttg 300
tttaacgtaa tgtgtttcaa cttatttgac t 331

<210> 1473
<211> 329
<212> DNA
<213> Homo sapiens

<400> 1473
ggacctttg atcccatcat gggactgctg cccagcccta taccactgaa atgggggaa 60
atagaagcct tctttccttg ttgccactct tgtatctttt gaacatgggt tacctgcctt 120
cgcgtctttt ggaacaaaag ggaatcataa gctcttgagt ctctgttttc tgctgtcatc 180
tactcttcct gcctctggca cctcccagct cctgactttc tcctgcttcc ccctggagcc 240
agagacgtgg ctgggaagag cccctggcct ttgaagccag tggcggtggt gaccaggggc 300
aacaggccac tgtgctcctg gatgcgtgg 329

<210> 1474
<211> 323
<212> DNA
<213> Homo sapiens

<400> 1474
ggggggcgg taaacgacag aagggaactg ttgtattttt aatagacaat ttcacgacgt 60
tggcgaggct ggtcttgaac ccctgacctc aggtgatcca cccgcctcag cctctcaaag 120
cgctgggaca ggcgtgagac accgtgctgg gacagtagta acttctaatg gataatgtat 180
gcgtggggtg gaaaggggag taccagtatt tttatttcta acacatatac aaaacaccag 240
cttgctgttc accctgaaga accctgggca cagagcttat tcatattatc gtgccatcgt 300
gccctatgca ttcttcaatg ggc 323

<210> 1475
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1475
atccattgtt aaagaaataa atcagcgctt caaagacaaa cttccagtgc ccattccaat 60
cgaattcatt atgaccgtga ttgcagcagg tgtatcctac ggctgtgact ttaaaaacag 120
gtttaaagtg gctgtggttg gggacatgaa tcctggattt cagcccccta ttacacctga 180
cgtggagact ttccaaaaca ccgtaggaga ttgcttcggc atcgcaatgg ttgcatttgc 240
agtggccttt tcagttgcca gcgtctattc cctcaaatac gattatccac ttgatggcaa 300
tcaggagtta atagccttgg gactgggt 328

<210> 1476
<211> 323
<212> DNA
<213> Homo sapiens

<400> 1476
gagagaggac agagaggcgg gtcacagctt gacctgggtt ggtcctttcc agctttgggt 60
catagagagg aatttggctt ttcctttaag tgcaatggga aattgttgta agattttgag 120
cagggctgca ccattatttg acttatgtgt taacagcgtg agagttaaga atttgctgct 180
aggccaggcg cagtggctca cgcctataat cccaacattt tgggaggccg aggtggtaca 240
cttgaggtca ggagttcgag accagtctgg ccaacatggc aaaaccctgt ctctactgaa 300
aaatacaaag attaggttgg gca 323

<210> 1477
<211> 135
<212> DNA
<213> Homo sapiens

<400> 1477
ggaacctgaa atgagaaaag ggtagtgaag gaagacttga tgtccttcat aactggcctg 60
catcctgccc agcccctcct ttctttccag aagcccacca gtggcccaga gtggaagggt 120
gggagtcaga ccagt 135

<210> 1478
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1478
ttgcctacaa ttctaccacg tattttctat aagcatgcaa atctagtata ggtagaggat 60
attacaggct aattaatctc ttggcatctg gtctacccag gcccagtgct ttgttcttga 120
acaaacaaat aaaaaaaaaa cacagagaaa taaccatgca aatatgagaa atgttgcaga 180
aatttgaaat tgagacagct tcctcttttc tataggattt ttttttaggg gaaaacaatc 240
tctatattca gtcttatata ttacctgcct tcaaaaaatc aaaacattga aagttaagca 300
aaattcctgt cagaaagg 318

<210> 1479
<211> 292
<212> DNA
<213> Homo sapiens

<400> 1479
aaatggacga aggaggaaaa agaaaggaga agagtttgaa gacagaagaa attaaggaaa 60
gtaaactaaa gcaattgaaa ctatttggca atcctttccc tctcaactct aaggcttatt 120
ctaaattagg ggttttctag atatacaatc atgtcatctg caaacaggga caatttgact 180
tcctcttttc ctaattgaac accctaaatt aggaaagtta aacacctaaa atgtcaacac 240
tttcatttaa agaatgtggg agagccgggt gcaagtggcc cacacctata at 292

<210> 1480
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1480
gggaggggcg ggagggagga taggagagca ccacacatag tcaggggagg ctttcaaaag 60
agtcttgact ctaagaatac ccaaaaagaa aggtaatgca aatttcaaac ataccacatg 120
catttcttt tccttcccaa atcccactaa ggctattttt tttaaatcca ggttctagtc 180
ctggttttgt catgaccttа atttacccct cacctaatca cctttgactc agtttcttca 240
tctataaact gaggggcttg gcctcactga gttctaatgt cctttataca tttaatcttc 300
tatgagtcta agatgcaatt tctc 324

<210> 1481
<211> 325
<212> DNA
<213> Homo sapiens

<400> 1481
tcacagtcac cacagcttcg ttgcacatct tatttctttt gataatcctt caggtttttt 60
tttaaagaca atattgtacc tttatttaa ttattataca tttcttacat tgtcttatga 120
ttctgatggt tcttcagtga tccactgaaa acacctttat aatcactgaa taggatatta 180
aagaagtgtt tttcttgact ttatcacatt gcttttggat ctttgaaact ggagagaaaa 240
gtcgggcaca gtggctcatg cctgtaatcc caacactttg agaggccaac aagtttgagt 300
ccaggagttc aagacaccct gggca 325

<210> 1482
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1482

aaggtggctt tactaatcga tattcttata ctgacaagtg ctcaaacatg gcgtggcaaa 60
gccttcatta agcactgatt agcagttaat ctgtctttca ggcagctaac tttgctgagt 120
aaatgtacca atgacccctа aaaatgctac aataatttta tttaaataat tgcaagtctt 180
aggaacacct ctaaatcata aaaagaaaat gaaaaaatag aatgggtgac actaacaatg 240
tgtatttttt gttcattgct aaaaaaaaaa tgaaggtacg gtgtcaagtt tcatgggtga 300
ctttttcttc ttagtcggaa at 322

<210> 1483
<211> 319
<212> DNA
<213> Homo sapiens

<400> 1483
ggctagagta cagtggcatg atctcggctc actgcaacct ccacctcctg ggttcaagca 60
gttctctgcc tcagcctccc aagtagctga gattacaggc ttcggccacc actcccggct 120
aatttttttt gcatttttag tagagatggg ggtcctcccc cgtgcctccc ctaccactca 180
tttcgatccc ctcaaattca tcttctccct gcttctgtgg ctacattatc ctgacctgac 240
ggaatatcgt tctgcatggc tcgcttcccg atattttccc cttgcacatc accggttact 300
catgttattg cccctcgag 319

<210> 1484
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1484
tcagctaatt cactcttttc ttctttctgg taaggaaatt gaggcttcag ggtgattttg 60
tgactttcca gacatctgta gtggaagaac taggtctagg cccaaatcat ttaattacta 120
gctgagcgac ctgcacacaa ctgcaagaaa ttgttccatc acaaaacttc aggatgattg 180
gggttctctc tttttctctc ttttattcca agcttaaaaa aaaaaatctg ctgaacgtcc 240
cactggagct gaaattgtag aagacaacta gctctttaat tatgatgtgc agggagctgc 300
ttttacttt cacttggctc tg 322

<210> 1485
<211> 321
<212> DNA
<213> Homo sapiens

<400> 1485
accctactac ttgagaaatt agctgctcaa tattgacatg gacactgaga agaaaaatac 60
attttggcat aaaattagga agaataaaat tttattatgg gaggcttcat attcaaaaac 120
aactaaagca ttttaaaata taccatttac aataacaaaa agagagttaa ctgctcggat 180
cccattgaag ttcatgaagt tgatatactg tagcaatcaa aattctcaag attaatattt 240
catgacagaa tacctggatt tagggccagg cgaggtggct cacgcctgta atcccagcac 300
tttgggaagc caaggccggc c 321

<210> 1486
<211> 321
<212> DNA
<213> Homo sapiens

<400> 1486
taaatgtcta ctaccatgtt taacattata tttgaccagt attcattgaa cagcaacaga 60
aaaaaaatat agaatatata agcaatgttc tcaaaaatct attagcagta aaataaaata 120
tttttcttat agtgaaaaag taatcaccat gataaagcaa attccaatat aagtacagaa 180
atatcataca aaatatttta cagtttttag ttccattcct gttatgtatg ttagtaaaca 240
aaaattagaa tattttaaag cctatgtatg acagttaact atcagaatta ttcttgtaca 300

ttgagaacac tagacagtag g 321

<210> 1487
<211> 322
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(322)
<223> n = A,T,C or G

<400> 1487
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aatttctgaa ttctgaaaga ccaagatgat tcttcaatag ccacaggtct tggaccctgt 120
ttctcttaat aactgtaact atagaacttg ctcagtgcct tactcttagg agaggcttca 180
gaaatattta ttgcatgcaa ttactgaata tatggcacat gtaacatctg ttgtatcaac 240
agataaacag gattctgagc tgtttttttc tccattgggc ttcaggtaca tagaaatgga 300
ttgacggccg ggcgtggtgg cn 322

<210> 1488
<211> 334
<212> DNA
<213> Homo sapiens

<400> 1488
agaaggggag caccctgcca tgccactgct gcctgtgtat gtgcatccca cccttctccc 60
cgctgctgaa ccaccactgt agttagaaca ttgtcgggga cagagcccac cagccccgct 120
cctgccaggg cccactcctg tgctgaaact atcaccagca tgaaactaga catgaagaaa 180
agcagaccta gcccttccct gagtggccac tcctgcccat gggaacacac acagagtgtg 240
cacacagtcc tgcaccaacc agtgccccac ccctgcacta acatcactgc tggttcacac 300
acccacagtt atggggaggg gcgttttccc aagc 334

<210> 1489
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1489
aggtgtatcc tacggctgtg actttaaaaa caggtttaaa gtggctgtgg ttggggacat 60
gaatcctgga tttcagcccc ctattacacc tgacgtggag actttccaaa acaccgtagg 120
agattgcttc ggcatcgcaa tggttgcatt tgcagtggcc ttttcagttg ccagcgtcta 180
ttccctcaaa tacgattatc cacttgatgg caatcaggag ttaatagcct tgggactggg 240
taacatagtc tgtggagtat tcagaggatt tgctgggagt actgccctct ccagatcagc 300
agttcaggag agcccaggag gg 322

<210> 1490
<211> 156
<212> DNA
<213> Homo sapiens

<400> 1490
tccggctgct atatttctat tgagggatgc atttgccgtc tgcctcctct ttcttgttgt 60
ttgtgttagt tgatttgttc gtttaggttc tttaagtatg ttttgttttc gtcttgtgtt 120
tggcttatca tgtattttgg tggtcagggt gtcttg 156

<210> 1491

<211> 233
<212> DNA
<213> Homo sapiens

<400> 1491
tcttataggt gatttctgtc ttataggtga ttataatcaa gtgtaggctt cctgaatttt 60
gacatccttt tagaacttgg gtctggaatt ccagaaatgt taattgctgc ttgtatttgt 120
tcttgtttgt tttttagcca gtatttgccc tttctatcca gccttatgaa taatagcagt 180
aaaatcacag tatcttggtc agtctttatt tttttccttt gttcttttt acg 233

<210> 1492
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1492
tcactcaaag gtttcattgt ctgaaatatc agcctaaacg tagtttatgt ttaggaagca 60
acaaccgtaa atagtcccac atccaaacgg agtggattta ggtttcactt tttcaaggaa 120
aaaccatcaa ataaattttc cacatactta taaaccatcc cacgtataga atccattttt 180
actgacacaa atttagtacc aataaaacgac tcttcttctc aatttgtttt atttaacaat 240
aagtcttgaa cgtcattccc agttaacatt ttgaagagtt tcctctcttt cgttctgctt 300
tagctgcaaa gtattct 317

<210> 1493
<211> 314
<212> DNA
<213> Homo sapiens

<400> 1493
cagaggatta agttgagcat ggggcctcat tacagggcag ggactctgtg actgcactgc 60
cactttccca taaagcctgc cttggggatg gggaatacca cgtaggaaag agagtcttta 120
aagtgttctg gggacaggtt ttaaagttat ttgaatgact taagagctcg tgatgtcctt 180
tagatacaaa agattttcac gtggggaagg acattaaatt tgtttttttat aaagttcact 240
ctggcgtcta atcatgtaga aagactagta ggtaagtcaa ctaaaaaact gttggatagt 300
ctaggaaagt ggtt 314

<210> 1494
<211> 313
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

<400> 1494
taatgttaga ggactgtgaa agttggggaa agaagtttag tttgtaggta cttgtttttt 60
tgagcaggga attgtcttgg ctggaggtga atgtcagata ggttaatgta ggcaagtgta 120
gaatggaaat gaaggtgtga tcatttagga ggttatttgt ttaggtgaga gagttaatga 180
attaggtttt gtattaacga atgaaaatgg gagcagataa atttttaaca aattaagaat 240
catattttaa aatcagcacc aggcacctag aactcattgg caaatagaaa ctttcaaaag 300
atataatcag gtn 313

<210> 1495
<211> 314
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(314)
<223> n = A,T,C or G

<400> 1495
gtgccttccc atcagcccct gtgctgggna ccggggaacc tggggttcct ggtttgagct 60
cagggagagc cttgggccac taggggtacc ccaacgcggt ggaaagccca tgacaggaag 120
gtgagctgtg agggaggaga ggtgaggcac tactggcaga aaagaaaaag aaaccacgcc 180
acggagagcg ggacctgggt ctcccatgga aaaaagtgcc ttcccatcag tccctgcgct 240
gggccccgtg gacccaggcg accctggttc taggcctggg tgcacctcan gcccgctagg 300
tgtaccccaa agca 314

<210> 1496
<211> 312
<212> DNA
<213> Homo sapiens

<400> 1496
acagtcagag gtaaagaggt cactgatgat cttggtcaga ggagtttcag gagcctgaca 60
gggacggaag ccggcaagcc ccgaatcagg gaaggagtgg gaggtgagaa cagatgatca 120
agggcagatg actcttgcaa ggcgtggctg agaagcatag agacacagtg aggctcttgg 180
gggacaactg gaaggcatgg ggcactttga ttttaactca gggaaccctg agcttaccta 240
agtgcagatg gccagtcaca gctgcaaccc atagactaag aagccatggg ccaggtgcag 300
tggctcacac ct 312

<210> 1497
<211> 314
<212> DNA
<213> Homo sapiens

<400> 1497
gcgtgtgtga gtgggtgcat gtgtgagtgg gtgcgcgtgc gtgtgtgagt ggatgcatgt 60
gtgtgtatga gtgggtgcat gtgtgcgtga gtgggtgcat gtgtgcgtga gtggatgcat 120
gtgtgcgtgt gtgagtggtt gcatgtgtgc gtgtgttaat gggtgcatgt gtgcgtgtga 180
gtgggtgcat gtatgtattc gtgggtgcat gtgtgcacgt gtgagtgggt atgcgtgcgt 240
gtgtgagtgg gtgcatgtgt gaatgggtgt gtgtgcgtgt gtgaatgagt gcatgtgtgc 300
atgtgtgaat gggg 314

<210> 1498
<211> 307
<212> DNA
<213> Homo sapiens

<400> 1498
ggaggcggct gtggcatttt gctcacattg gatacctgat tgggacattt atttaaaatg 60
ctacccattt tcaaatttct gagccaacat catgatttaa ttataccggc ttcatcgcaa 120
gttttacaat ccgataaagc aaggcccact tcattagcta ttttttttctt tatataacat 180
gccctaaaca ttcatttttt cttgtgaaaa aatgaaatgc acaattttaa taaaattcta 240
attatgacgg ctgacattcc aattaaaaac ctgcattttt gtttagaggg ctctttaata 300
atattag 307

<210> 1499
<211> 251
<212> DNA

<213> Homo sapiens

<400> 1499
gaacaatact tttctctaac atcgtacgag gaagaaaaca aacacatcag atattttcag 60
cactaaaaga gatggctttc cccacatata tgtcaaagaa atatgcaaga ctactggatt 120
ttgatctcat ggttgcagcg ggtgaatagg tggccttttg tgatctccta catcaccctg 180
gaagtgagac ttcttcgggt tcttctagag tcagattggt atcagaatgg catagcaact 240
taaccttgca g 251

<210> 1500
<211> 309
<212> DNA
<213> Homo sapiens

<400> 1500
tgacctggat caactatgaa catttacatt tattagttaa catctacatt ggctaaactg 60
tagcatctga cttgatgtca tcctaaaata atatttcctt cggagtattt tcttcactct 120
gtaattgcta actgctttcc tatttgtttt gtaacttatt tccttaatta gagaatattt 180
ttaaaaataa aatttgagca aggattgtag atacctgaga tttagtctgc ctctgcttta 240
aatcagtgta ccagtttgct aagtttgcca taatgaagta ccacagagaa cgagtagttt 300
aaacggcag 309

<210> 1501
<211> 309
<212> DNA
<213> Homo sapiens

<400> 1501
gtgccttccc atcagcccct gtgctgggta ccggggaacc tggggttcct ggtttgagct 60
cagggagagc cttgggccac taggggtacc ccaacgcggt ggaaagccca tgagaggaag 120
gtgagctgtg agggaggaga ggtgaggcac tattggcaga aaagaaaaag aaaccacgcc 180
acggagagcg ggacctgggt ctcccatgga aaaaagtgcc ttcccatcag tccctgcgct 240
gggccccgtg gacccaggcg accctggttc taggcctggg tgcacctcag gcccgctagg 300
tgtacccca 309

<210> 1502
<211> 306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(306)
<223> n = A,T,C or G

<400> 1502
ggactttggc aaagagcctg cgcaaatgct gtcaccgata ttccagtctg gatcctagaa 60
aggttcaatt ctacttcaac aaagaaaatt tttgagttat aggaataagg acggtaatct 120
gcattttgtc tctttgtatc ttcagtaatt tacttggtct cgtcaggttt gagcagtcac 180
tttaggataa gaatgtgcct ctcaagcctt gactccctgg tattcttttt ttgattgcat 240
tcaacttcgt tacttgagct tcagcaactt aagaacttct gaagttctta nagatctgaa 300
gttctt 306

<210> 1503
<211> 283
<212> DNA
<213> Homo sapiens

<400> 1503
cattatagtt gattttgcta aatcttaatt taaaagcctc attttcctag aaatctaatt 60
attcagttat tcatgacaat attttttaa aagtaagaaa ttctgagttg tcttcttgga 120
gctgtaggtc ttgaagcagc aacgtctttc aggggttgga gacagaaacc cattctccaa 180
tctcagtagt tttttcgaaa ggctgtgatc atttattgat cgtgatatga cttgttacta 240
gggtactgaa aaaaaatgtc taaggccttt acagaaacat ttt 283

<210> 1504
<211> 282
<212> DNA
<213> Homo sapiens

<400> 1504
gagccaccgt gcctggcctc accattgtta aaattatgga aatcgtgttt gcaaagcagg 60
ttggcctgtt tggaaaaggg tgtcataatt tctcaggtaa ctccaaaaag agaaagctac 120
gaaaattacc ttaatacatt cattacagtc tcagtataag attatagctt cctctcccaa 180
agcgtaacca caacctgacg caggatgagt tggtttgaaa ataccgcata caatatcctc 240
ttgagtagaa tcataattta gaactctaaa aatgaccgga aa 282

<210> 1505
<211> 380
<212> DNA
<213> Homo sapiens

<400> 1505
atggatgaag atttgtcagc ctcccaggat cactctcaag ccgtgactct gatacaagag 60
aaaatgactt tattcaagag cctgatggat agatttgagc atcattcgaa cattctcctt 120
acctttgaaa ataaggatga aaatcacttg ccattggtac cacctaacaa attggaggaa 180
atgaaaagac gaatcaacaa cattttggaa aaaaatttat tctacttcta gaatttcatt 240
actacaagtg cttagttctt ggtttggtag atgaagtgaa atcaaaattg gatatttgga 300
acattaaata tgggagcaga gaatctgtgg aattattgct ggaagactgg cataaattta 360
ttgaaagaaa aagaattcct 380

<210> 1506
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1506
ctgatttgga gctggctgac aggaagtgct tcaaccccac aggagtatgc tgatgtaaaa 60
cagagaagaa ttcagttccc acaacagaaa gcaaaggctt tagccttatt ttatgccaga 120
ctagctgact ccagggacca tgatctgtgt ttctctgaaa atcattctac tttctaattt 180
ctctaaacct acaaaaactt ttctcctcct cttctctttt atcttcctcc tctataacaa 240
ccaggccttt gaaggtatca ggggtgggaa agaaaaggtg ctaatagggt aatatgtatt 300
gaaagaagtc gatgaaataa atttttaaaa acatcaagta aaataggcaa cac 353

<210> 1507
<211> 347
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(347)
<223> n = A,T,C or G

<400> 1507
tccacgggat acctgggcac tggtgcactg cacctgactg gtggaaagta ntactcaccg 60
ccatgcacca gcctccctcg ccccagtgaa ccctgccaac cccaccacct ccagagcctc 120
acccctgcac caacactgcc gcaagagtga aactaggaag ggagaacaat ggacctcccc 180
taccctgagc agccacccca cctgagtgat catgcacaga gggcaggcac agacctgcac 240
ccgccagcac ccgaccccca tgctaatacc accaccagca cagtagccag caggggccct 300
caaagcagta ttgcctctgc tgctgctgtg aatgcctgca gggaggc 347

<210> 1508
<211> 176
<212> DNA
<213> Homo sapiens

<400> 1508
tgggaacaat ccaaagagtc taagtttctt ttccatccag cgtgagtttc ctatttagtg 60
aagtaaagct caacttttat caatagtttc attctcttgt ggtatgtaaa acctacacac 120
actcagaggc acccagagga aactacactc tgaggtatta gtaaattctc tgcaag 176

<210> 1509
<211> 334
<212> DNA
<213> Homo sapiens

<400> 1509
ggagtcggac tgggagtgaa acccagctca attcctaata ggttgaagat atgattacct 60
caatgcagtc tgcttatcag aaaggcatat catatcatcc ggatgtttta tatacaatgg 120
ttggcataca acaaaagact gttagatatg gaaggaagca agaaaatgtg accaaatcaa 180
gagaaaacaa aaccaaataa agaatatcca gataattgag ttagcaaatg agaaccttaa 240
aataactgat taacaagttt tagatgataa aagaaaagag aacttccgtt ggaatctgca 300
gaaatggtgt aaaatgaata ttctacaact ggag 334

<210> 1510
<211> 331
<212> DNA
<213> Homo sapiens

<400> 1510
tccgataaag caagtcccac ttcattagtt tttttttct ttatataata tgtcctaaac 60
attcattttt tcatgtgaaa aaatgaaatg cagaatttta ataaaatcct aattatgatg 120
gctgacatca caattaaaat cctgcatttt tgtttaaagg gctctttaat aatattaaat 180
cttagcactc aagagtcttc gtacatcatt gaaatctttt ggtcttgtta ttggaatatt 240
cttcacgtaa gtatatcata gctaactgaa tttatttcta agtattttta cagttttatt 300
tcatattttg acattgtgaa ttggtttttt t 331

<210> 1511
<211> 434
<212> DNA
<213> Homo sapiens

<400> 1511
atatctacat agatcttttt gcatgattcc accgattcca tccgcacgaa ttccgttgct 60
gtcgcctaat gtaacaaaac tattatctgg aagagccaaa atttgaactc agatctctct 120
ggccctacta aatgcatcac ataaattat ttcatgggca atctttccct gcaccttaat 180
tgatttattt ctgccaaatg tatgtgttcc tacatcttta tggaatattc tgacatggga 240
atgcccccag gtctgtgaag actggcttct ctggggttgg atcaataaat gaaggaaaat 300
tttgcagggg gttatacaag atgggggtt gaaggggac aaattggtca atatagctcc 360
cttcaaaaca aaaccctcag tatatctttg tgatgccaaa ctagagatta tttcctttgt 420

aaaaagcaag gacg 434

<210> 1512
<211> 423
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(423)
<223> n = A,T,C or G

<400> 1512
cgttggtgtc ggggaggaga gcttggaaga tgtcttatgt ccacccccctg acaatgatga 60
tgggggtaat gactttgata ttgaagatga agtagttgaa gtagaaaata gggaagaaaa 120
cctactgaaa atttctcgca gagtgaaaga gtacaaagtg gaaattttga atcctcccag 180
ggaagggaaa aagcttttgg tgctagatgt tgattataca ttatttgacc acaggtcttg 240
tgcagagact ggggtagaat taatgcggcc atatcttcat gaatttctaa catctgccta 300
tgaagattat gacattgtta tttggtctgc aacaaatatg aagtggattg aagctaaaat 360
gaaagagctg ggagtgagca caaatgcaaa ttataagatt actttcatgt tggatagtgc 420
tgn 423

<210> 1513
<211> 426
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(426)
<223> n = A,T,C or G

<400> 1513
cgttggtggc gggggtagaa catatagaaa ttgaggtcat cgaaagtcag gaaattgaan 60
ctcaggaggg ggaggatgat acctttctaa cagcccaaga tggtgaggaa aaagaaaatg 120
agaaagatat accaggttct ggtgagggta cacaagaagt atctaaacct cttccttcag 180
aagggagcct agctgaggct gatcacacag ctcatgaaga gatggaagct catacgactg 240
tgaaagaagc tgaggatgac aacatctcgg tcacaatcca ggctgaagat gccatcactc 300
tggattttga tggcgatgac ctcctagaaa caggtaaaaa tgtgagaatt acagattctg 360
aagcaagtaa gccaaaagat gggcaggacg ccattgcaca gagcccggag aatgatagca 420
aggatn 426

<210> 1514
<211> 384
<212> DNA
<213> Homo sapiens

<400> 1514
catgcgccac cacacctgga tatttttttt ttttgcattt tcagcaaaaa ttggcctttg 60
ccatgttgcc caggctggct tcaatctcct gacctcaagg gatcaaccaa cctcctcctc 120
ccaaggggggg gggattatag gtgggagcca ctacacctgg acagaattta ccttattgga 180
attggcaaag gggaagttcc caaaacagac catgttctac aaacttgtgt attgtgggcc 240
aaggaattga tgctttttttg gatccgcagg agcaacaaaa ttaccctcac cttgcctggg 300
ggcgggggct cacacctgta atcccaccac tttgggaggc caaggcagga ggatcacaag 360
gtccagagat aaaaaccatc ctct 384

<210> 1515

<211> 413
<212> DNA
<213> Homo sapiens

<400> 1515
cgttgctgtc ggatcatttg aagcaaacct cagaaatcac tttattccta aatatttaag 60
tatgcatctc taacttatta aaatttttt ggttttgttt tttgtttttc tgagacggaa 120
tttcgctctt gttgcccagg ctggagtgca atggcgcaat cttggctcgc tgcaacctct 180
gtctcccagg ttcaagtgat tctcctgtct ctactaaaaa aacaaaaaaa atcagctggg 240
tgtggtggcg ggggcctgta atctcaacta ctcgggaggt tgaggcagga gaattgcttg 300
aacctgggag gtggagattg cagtgagctg aaatcacgcc actgcactcg agcctgggca 360
actgaacgag actctgtctc aaaaaaaaaa ggccaggcat tgggggttca tgt 413

<210> 1516
<211> 417
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(417)
<223> n = A,T,C or G

<400> 1516
tacggctgct atgaagtcta cagaagggta cccctgccaa tgttaccctt ctcaatagcg 60
ttgcatttct tgaaagtctt ttatcttaaa agttgtatgt ggattttcaa ctttatgttt 120
ttattttaaa aaataagatg tgatgttatt tttcaaagct caaaactatg tttaccctat 180
aagttacaag cctcctgggc cacatattca tttttaagaa gcagagaatt atgatgacat 240
atggatttca ggacctctga gggaacttgc atgggggac cattaatatt gtatgtgcgg 300
ccgggcgcgg tggctcacgc ctgtaatccc agcacttggg aggccgaggc gggcggatca 360
cgaggtcagg agatcgagac catcccggct aaaacggtga aaccccgtct ctactan 417

<210> 1517
<211> 376
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(376)
<223> n = A,T,C or G

<400> 1517
taccctgcc aatgttaccc ttctcaatag cgttgcattt cttgaaagtc ttttatctta 60
aaagttgtat gtggattttc aactttatgt ttttatttta aaaaataaga tgtgatgtta 120
tttttcaaag ctcaaaacta tgtttaccct ataagttaca agcctcctgg gccacatatt 180
catttttaag aagcagagaa ttatgatgac atatggattt caggacctct gagggaactt 240
gcatgggggg accattaata ttgtatgtgc ggccgggcgc ggtggctcac gcctgtaatc 300
ccagcacttg ggaggccgag gcgggcggat cacgaggtca ggagatcgag accatcctcg 360
ctaanacggt gaaacc 376

<210> 1518
<211> 416
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(416)
<223> n = A,T,C or G

<400> 1518
cgttgctgtc gcattatcat ggaattgaat attgcttgga tgaccgaaaa gctttggaaa 60
gagatggagg attttctgaa cttcagtctc gtcttattcg ttatgaaact caaactacct 120
gcaccagaga aagttttcca gtacctactg tgttgagccc tcttccatct cctgtagttt 180
cgtcagatcc tggaagtgtc cctgacggag aagttttaca aaatgaactt cgaactgaag 240
tatcccgatt gaaacggaga tctaaagatc tgaattgcct ttatcccaga aaaagacttg 300
tgaaatcctg aagttcagag tctcttcttt ctcagacaac tggtaatagt aatcactatc 360
atcatcatgt gacatccaga aagccacaaa cagagcggtc cttaccagtg acttgn 416

<210> 1519
<211> 407
<212> DNA
<213> Homo sapiens

<400> 1519
cgttgctgtc ggggctgttg tgagagctat aggcttggac gtaaaacaat gctagatgtg 60
gtgtctgctc ctgagcttaa aagtagcttg agaaagacag tgatattatc agaaaagaat 120
gtgcataatg aaaagttgaa acttttaaaa actcactcaa aactaagttt taaaaaagag 180
ccaccgcgcc cagcctgaga cgtgttttaa agactgactt ttgtttcttt tctagatata 240
aatttagaaa ttgagaagtg tattttgaaa aggcataata agaaaaacta tggcatataa 300
ttattttaac ttgccatatg aaaacctaag gcacagggag gtaactcgcc tacaggtgca 360
gccctaggaa gtcagggagc caggattcac tgtcagctga ctgactc 407

<210> 1520
<211> 400
<212> DNA
<213> Homo sapiens

<400> 1520
ggcacgagga atgaatgaag attgtcttat tagctttgga ggaagctgtc aggtgatagg 60
atggacagta tgttgggaaa ggtctctctg gcatgaagag gtggcatatg gaaatggcat 120
ctgagctgag agcataggcg ggcgagaagc cagttgtggg caaaatgctt tctatgaacg 180
gaggaagtaa gtgcaaaggc cctggggtgg gaatgtgcac aatgaaacca acatggtgca 240
gccgagcacg gcagtgtggc ccacaggagg ctggacaccc ctttgcccca gcccatgcct 300
tctgggcagg ccacacccgc tgtcctttct ggctgtttag aggaagtaga aatcagatac 360
agaaattccc acctctgttc tttgttcctt tgtctcagct 400

<210> 1521
<211> 416
<212> DNA
<213> Homo sapiens

<400> 1521
tacggctgcg ttaagactac agaagggctc gaccccacgt cacgccttct agaaccctcc 60
acctcaggcc gctcgggggc atgccgggat ttgttgtgtg tagagggccg ctgccgcgag 120
ggatgccggg atttgcagtc cttccggact acaagcaaaa tggctgcttc tcgacctctt 180
agctggggct tagggtgtct ctggctggcc aagagtatga cctaggttca aatcctcact 240
ccgcaagttt cgtatctcag tttccacagt agtaaaatga gataataata gtacatataa 300
tcatagagtt gatgtgcgga gtacatgaat ttaaacatct agagccaggg cagggcggtg 360
gctcactcgt gtaatcccag caatttggaa ggtggaggcg ggaggatctc ttgagc 416

<210> 1522
<211> 417

<212> DNA
<213> Homo sapiens

<400> 1522
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ggcttctgga ctctgcagtc caggtctccc ttctcccact tgcctaccct caatgccaca 120
ctgtttttga agtggcccat aacttgaagg aaaagtttaa agacagttca atttaatcat 180
cagaatgcat tctttttttt ttcggagacg gagtttcact cttactgccc aggctggagt 240
gcaatggtgc aatgatctcg gctcactgca acctctgcct cctgggttca agtgattctc 300
cagcctcagc ctcccgagta gctgggatta tgggcgccca ccaccatgcc cagctaattt 360
ttggattttt ttttttaaaa aaaatggggt ttcccccagg ggggccaagt cttggcg 417

<210> 1523
<211> 387
<212> DNA
<213> Homo sapiens

<400> 1523
ctatgctttc tggaactttg cccttttagca aagtaaattg ctcatcattt ccggaacatg 60
cagtgttgtt tcttgctcct gctcccttct cctggaatgg ctgcccctgt tcctccacct 120
gaaacatcct tcttccttct tcaggtccca agcaggttgt ctactacccc catgggcttt 180
gcacacacct gcactgtagt atgtgttgca ctgtgtggtc atggtttcca ggttgattgc 240
agacagcaag cctgggagtt tctggagatc tcaagagtga ggctccttca gctgtgtgcc 300
tccatgcctc acctattgcc tcacctgcaa caggtgctca acaagtgttt gctgttaagt 360
aaaagtgaag gggtggtgac aaaaaca 387

<210> 1524
<211> 404
<212> DNA
<213> Homo sapiens

<400> 1524
gcttgccagt ctttgctttg ataggtggtt tttgcttagg ctacgataaa ttgtttcatc 60
ttttctaaag agggatgagg aagtatttac tttgtgagat tggaaaaccg tgtggttggt 120
gtggaaaata agcatgttat taataaacag ctagtcttgt gctccatact cttggatgga 180
aggtagaaat aaccttgcct ctattgctga gatttaaaaa aataaaaagc taggctacta 240
cccgtgcctt cctcgtccac aacacaggca cagggtggca ggtagtgatg agaaacaggc 300
tgccaagatg gtccctggat gactaggagg tgtgtgatgt gcgtccagtt gtctggatgg 360
ggcaactgga atccttcatt gtgtggttca tgcttgtgtg tgca 404

<210> 1525
<211> 416
<212> DNA
<213> Homo sapiens

<400> 1525
cagaacccaa agcggaagca ggctccaggt ctcggagctc atccagcaca cctacgagcc 60
cgaagccccc cctgcagtcc cccaaaccca gtctggcagc acggcccgtc atcccgcaga 120
aaccaagaac cgcctcacgg cctgatgaca ttccagactc tccatctagc ccgaaagttg 180
cccttcttcc acctgtcctg aaaaaagttc cttcagacaa agagagagat ggccagagta 240
gcccccagcc cagccccagg acattttcac aggaagtttc aaggagaagc tggggccagc 300
aggcccagga gtatcaagaa caaaagcaac ggtcctccag taaagatggc catcaaggca 360
gcaaatctaa tgactccggg gaagaagcag aaaaagagtt tatttttgtg taaagg 416

<210> 1526
<211> 408
<212> DNA

<213> Homo sapiens

<400> 1526
ctctgcctcg gccggtaagg ccgaggacga ggttgaagga tggccgagag gagaccgagc 60
gtgaggggtc cgggggcgag gaggcgcagg gagaagtccc cagcgctggg ggagaagagc 120
ctgccgagga ggactccgag gactggtgcg tgccctgcag cgactaggag gtggagctgc 180
ctgcggatgg gcagccctgg atgcccccgc cctccgaaat ccagcggctc tatgaactgc 240
tggctgccca cggtactctg gagctgcaag ccgagatcct gccccgccgg cctcccacgc 300
cggaggccca gagcgaagag gagagatccg atgaggagcc ggaggccaaa gaagaggaag 360
aggaaaaacc acacatgccc acggaatttg attttgatga tgagccag 408

<210> 1527
<211> 413
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(413)
<223> n = A,T,C or G

<400> 1527
cgttgctgtc gccacaaagc tattagtagt taatcatata aaacttacct gcttggagaa 60
gaacgttgga aaattttgct gctttagcaa aaacttgata aaagtgaggc atttgaaaaa 120
aaggcatttg ttgctgtgga actcacattg ttaatcatca gtaggtttat atgtaaaaac 180
ttggaatggt cttgaaattc tcaaaatgtt ataggaatta tttttataaa tggtttattt 240
tcttacatgc tgttttgggt tttctacctt actctttgtg cttaaaagga gaaaggtcct 300
tactaaaacc acttcccttg tttctttata gaatttacaa cgggaatgat tttaccaacg 360
aaagctatgg caacccagga attgactgtc aaaagaaaac tgagtgggaa tan 413

<210> 1528
<211> 164
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(164)
<223> n = A,T,C or G

<400> 1528
tccttannaa atcactccct gacttaaatt ttaaatagtg ccttgactat cttttacagg 60
aaggaatagt attacatata tcanaattgt ttcattcatt tttaaataat tggaaaactc 120
ttaaaaatac cacaggaggc tgggtaccgg gggctcatgc ctcg 164

<210> 1529
<211> 405
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(405)
<223> n = A,T,C or G

<400> 1529
cgttgctgtc gggaggagct ggaacaggag aggaatcact ggcagtctga attcaagaaa 60

gtccaacatg aattggtgat ctacagtacc caggaggcgg aaggcttgta ctggagcaag 120
aaacacatgg gttatcgcca agctgaattc cagattctga aagctgagct ggaaagaacc 180
aaagaggaaa agcaagagtt aaaagagaaa ctgaaggaaa cagagacaca cctggaaatg 240
ctgcagaagg ctcaggtctc ctaccggacc ccagagggag atgacctaga aagggctttg 300
gcaaagctta cgcggctacg tatccacgtc agctatctcc ttacttctgt cctccctcac 360
ttggagcttc gngagatcgg gtatgactca aaacaagtgg atggt 405

<210> 1530
<211> 402
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(402)
<223> n = A,T,C or G

<400> 1530
cgttgctgtc gcccagctcc ctatgctgtg gacgtcgccg ctcaggtccc caccgtgcct 60
gtgccaccgg ctgcggtcct ctcgccgcct ctgccggaag tgctgctgcc tgccgccccc 120
gagctcctgc ctcagttccc cagctccctg gccacggtgt ctgcctctgt gcagagtgtg 180
cccacccaga ctgccacact tctgccacca gcaaacccac cgctgcctgg cgggcccggg 240
atcgccagcc cttgcccaac tgtccagctg acggtggaac cagtccaaga ggagcaggcc 300
tcacaggaca agccgcccgg cctcccgcag agctgtgaga gctantgagg ttctgatgtc 360
acttctggaa aagagctgag tgacagctgt gaaggcgcct tt 402

<210> 1531
<211> 407
<212> DNA
<213> Homo sapiens

<400> 1531
gattcgaatt ccgttgctgt cgtggacatc taaggatgga ctcggtgtct cttaattcat 60
ttagtaacca gaagcccaaa tgcaatgagt ttctgctgac ttgctagtct tagcaggagg 120
ttgtattttg aagacaggaa aatgcccccc tctgctttcc ttttttttct tgggaaacaa 180
agattggctt tgttgcccag gcggaggggc gaaacaacaa tttgggtttt accggaaacc 240
tcggtttcgg gggttaaggc aattttccgg cctaaccctc caagagtttg ggagataccg 300
gcctggggcc ccccccccgg gggagatttt ggtttttata aaaaaaaggg gttaaccatt 360
gtggcagggc gggtctaaac tcccagacca tgggaaccgc cctcccg 407

<210> 1532
<211> 416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(416)
<223> n = A,T,C or G

<400> 1532
cgttgctgtc ggcagaaagg aagcggattg ctcagatgcg ccagcagcag ctagaatcgg 60
agcagtttct gtttttcgaa gatcaactca agaagcaaga gttagcccga ggtcaaatgc 120
gaagtcagca aacctcaggg ctgtcagagc agattgatgg gagcgctttg tcctgctttt 180
ccacacacca gaacaattcc ttgctgaatg tatttgcaga tcaacctaat aaaagtgatg 240
caaccaatta tgctagccac tctcctcctg taaacagggc cttaacgcca gctgctactc 300
taagtgctgt tcagaattta gtggttgaag gactgcgatg tgtagttttg ccagaagatc 360

tttgccacaa atttctgcaa ctggcagaat ctaatacagt gagaggaata gaaacn 416

<210> 1533
<211> 408
<212> DNA
<213> Homo sapiens

<400> 1533
ggcacgaggc aagacggcgg tgaagaaacg gaatctgaat ccggttttca acgagactct 60
ccggtactcc gtcccgcagg ccgagcttca gggccgcgtg ctgagcctgt ctgtgtggca 120
ccgcgaaagc ctgggtcgca acatctttct gggcgaagtt gaagtgcccc tggacacgtg 180
ggactggggc tctgagccca cctggctccc cctgcagccc cgggtcccac cctctcccga 240
cgaccttccg agccgcgggt tactcgccct gtccctcaag tacgtccccg ccggctccga 300
gggcgcagga ctgcccccga gcggggagct gcacttctgg gtgaaggagg ctcgggacct 360
cctgccgctg cgggcaggat ccctggacac ttacgtacaa tgcttcgt 408

<210> 1534
<211> 412
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(412)
<223> n = A,T,C or G

<400> 1534
caaagaaggt acccctggga gcccatcgga gaccccaggc cccagcccag caggacctgc 60
aggggacgag ccagccgaga gcccatcgga gaccccaggc ccccgcccag caggacctgc 120
aggggacgag ccggccgaga gcccatcgga gaccccaggc ccccgcccag caggacctgc 180
aggggacgag ccagccaaga ccccatcgga gaccccaggc cccagcccgg caggacctac 240
aagggatgag ccagccgaga gcccatcgga gaccccaggc ccccgcccgg caggacctgc 300
aggggacgag ccagccgaga gcccatcgga gaccccaggc ccccgcccgg caggacctgc 360
aggggacgag ccagccgaga gcccatcgga gaccccaggc cccagcccgg cn 412

<210> 1535
<211> 412
<212> DNA
<213> Homo sapiens

<400> 1535
cgttgctgtc gcccctcgcc tcgtctctat ggcccctggg ggctggaggc cttggccgga 60
ggagacctga tgcctgcacc tgctgacccc acagccaggg agggcctggc agccccaccc 120
aggagacttc gctctaggaa ggtgtcctgc cctctcacac gtagcaatgg ggacctgtct 180
cgttccctga gcccctcccc actgggctct tcagccgcca gcactgcctt ggaacggccc 240
agcttcttat cccagacagg acacggagtc tcccggggtc cgagccctgt ggtcctgggc 300
tcccaggatg ccctgcccat agccacagcc ttcacggaat atgtccacgc ctactttcgt 360
gggcacagcc cccagctggc tggctcgagt aacttgggga gctgaccatg ac 412

<210> 1536
<211> 412
<212> DNA
<213> Homo sapiens

<400> 1536
ggcacgagcc tcggcctcgc tgtcttctgc agccgctact ggaacctcca cctcgactcc 60
agcggccccg acagcacgga agcatctgga taaagaacag gttagaaagg cagtggacgc 120

tctcttgacg cattgcaagt ccaggaaaaa caattatggg ttgcttttga atgagaatga 180
aagtttattt ttaatggtgg tattatggaa aattccaagt aaagaactga gggtcagatt 240
gaccttgcct catagtattc gatcagattc agaagatatc tgtttattta cgaaggatga 300
acccaattca actcctgaaa agacagaaca gttttataga aagcttttaa acaagcatgg 360
gattaaaacc ggttctcaga ttatctcctt ccaaactcta aagaaggaat at 412

<210> 1537
<211> 385
<212> DNA
<213> Homo sapiens

<400> 1537
cgttgctgtc ggcacaagcc aatttttcct atgatcaaaa aattctttct ttcctctgag 60
tgagagttat ctatatctga ggctaaagtt taccttgctt taataaataa tttgccacat 120
cattgcagaa gaggtatcct catgctgggg ttaatagaat atgtcagttt atcacttgtc 180
gcttatttag ctttaaaata aaaattaata ggcaaagcaa tggaatattt gcagtttcac 240
ctaaagagca gcataaggag gcgggaatcc aaagtgaagt tgtttgatat ggtctacttc 300
ttttttggaa tttcctgacc attaattaaa gaattggatt tgcaagtttg aaaactggaa 360
aagcaagaga tgggatgcca taatg 385

<210> 1538
<211> 396
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(396)
<223> n = A,T,C or G

<400> 1538
cgttgctgtc gggccatctt gtcttgtcct attcagggca gnggaagctt tacccacttc 60
ctactcttct tcatgttatt gaagcccagc taaaatgaac caacttagaa tataaaatta 120
ttttaatatt tcttcatctg acttctaatc ccattgttct ttttgctgta tctgaagata 180
gtcccaactt ctcaaatatg ttattaattt ctgggctgta aaatgaatat ggaagaggga 240
ctcaaatttt gtaaatgctg tggggttaca aatcaccaat tgtcctctgc ctctgtgttg 300
cctcagccta ccgcaagacc tccctacaca cacacacaca cagacacaca catccctgaa 360
gtcactctaa atatcagtaa ttatgaaagt ggcccg 396

<210> 1539
<211> 393
<212> DNA
<213> Homo sapiens

<400> 1539
cgttgctgtc ggtccatctt gtcttgtcct attcagggca gtggaagctt tacccacttc 60
ctactcttct tcatgttatc gaaccccagc taaaatgaac caacttagaa tataaaatta 120
ttttaatatt tcttcatctg acttctaatc ccattgttct ttttgctgta tctgaagata 180
cacccaactt ctcaaatatg ttattaattt ctgggctgta aaatgaatat ggaagaggga 240
ctcaaatttt gtaaatgctg tggggttaca aatcaccaat tgtcctctgc ctctgtgttg 300
cctcagccta ccgcaagacc tccctacaca cacacacaca cagacacaca catccctgaa 360
gtcactctaa atatcagtaa ttatgaaggt ggc 393

<210> 1540
<211> 392
<212> DNA
<213> Homo sapiens

<400> 1540
cgttgctgtc ggccaatttt tcctatgatc aaaaaattct ttctttcctc tgagtgagag 60
ttatctatat ctgaggctaa agtttacctt gctttaataa ataatttgcc acatcattgc 120
agaagaggta tcctcatgct ggggttaata gaatatgtca gtttatcact tgtcgcttat 180
ttagctttaa aataaaaatt aataggcaaa gcaatggaat atttgcagtt tcacctacag 240
agcagcatat ggaggcggga atccaaagtg aaggtgcttg atatggccta cttcttttt 300
ggaatttcct gaccattaat taaagaattg gatttgcaag tttgaaaact ggaaaagcaa 360
gagatgggat gccataatag taaacagccc tt 392

<210> 1541
<211> 359
<212> DNA
<213> Homo sapiens

<400> 1541
tgggagagat ataaacaaat aaggaaaata gtttgcataa ctgacttaga acagaatact 60
gaaatcagtc cagcataatg catgagcaag ttagtaagaa gattagattg gctggcattg 120
aggcaaatgt aaagttaatt tggaatttgg cagactatac tgtggatata aaaaaatgac 180
tagagccaga ccagccaggt ttaaatccta gctcttccat tcactgagca ctcacacaag 240
tcacttactc tctgcactta cctcatccat agcactgttg cgaggattaa aggaggcaat 300
gcttgtaaaa ttcttataac agttcctgta cataaaaaat tatccataag ggccgagcg 359

<210> 1542
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1542
gtctttattg aatggaaagg tgtcatgtga gacacaaaaa tataaaatct ttagattgct 60
ttattttaaa aacaaataag atacttacat tattaacaga agagcatact ggtttcggtc 120
cataaaatct ttgggaaggg acaactgtaa aggaagttct tttaaagaaa gagcaaaata 180
ttaaagatgg agagtcattt acaggtaaaa ctataagacg cagagaaagt tgttcttgaa 240
taacatagca tgcacaaaat tttaccatag tcgtcaatat gaaggatttt aatttctggc 300
tttcctatct tcttcttcag gatagcttcc ttcagcatag aattgctttc caatg 355

<210> 1543
<211> 357
<212> DNA
<213> Homo sapiens

<400> 1543
gtttccccag ttgtctcata agagctttgt catggttggt ttgttagaat cagggtctca 60
atggagtagt tgcattgcat ttggcttatt catcttttaa gtctcttctg tattttacta 120
gcctcctttc ttttcttgcc atttgtccag tagagttttt ctattttaga tattttattt 180
tgttttatcc ttgtggcgat gtgaatttta tttccattgg tgataaaggt caatttaagc 240
tatgtgattt cttttggtat actttgaata agaaaataca gaatgacaac aaactactat 300
aaattcagta acagattcaa tttaatttgt atttcatgtg agcaaaacag ctgaaaa 357

<210> 1544
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1544
aggagaaaca acagagggat attttcataa actattaatt ctatcaacta agaacaaatc 60
agcagaaacg ttcacagcta ccattaccag cattccatgt gagtataaag attctacaag 120

acttacttca cgataattta gtatgattat ttcttctaca gtttttgcta taagaggccg 180
aacccccttcc tgtcctaatc taaaaatacc acagtacacc ctccccaaca tgaccgactc 240
ttcagcatat aaaatgctaa ctaagctttt ccgaatgcac aatttggggg ttttcctttc 300
ttcttcttta tacatgtcta tattggttgg cttttggttt ggtttgtcat ttttctacca 360

<210> 1545
<211> 384
<212> DNA
<213> Homo sapiens

<400> 1545
cgttgctgtc gggagaatca agaggcacat gagcaagatg gaaatgatga actaaaggac 60
tctgaagaat ttggtgaaaa tgaagaagaa aatgtgcatt ccaaggagtt actctctgca 120
gaagaaaaca agagagctca tgaattaata gaggcagaag gaatagaaga tatagaaaaa 180
gaggacatcg aaagtcagga aattgaagct caagaaggtg aagatgatac ctttctaaca 240
gcccaagatg gtgaggaaga agaaaatgag aaagatatag caggttctgg tgatggtaca 300
caagaagtat ctaaacctct tccttcagaa gggagcctag ctgaggctga tcacacagct 360
catgaagaga tggaagctca tacg 384

<210> 1546
<211> 369
<212> DNA
<213> Homo sapiens

<400> 1546
ctcgagccca cgtgacgcct tctagaaccc tccacctcag gccgctcggg ggcatgccgg 60
gatttgttgt gtgtacaggg ccgctgccgc gagggatgcc gggatttgca gtccttccgg 120
actacaagca aaatggctgc ttctcgacct cttagctggg gcttagggtg tctctggctg 180
gccaagagta tgacctaggt tcaaatcctc actccgcaag tttcgtatct cagtttccac 240
agtagtaaaa tgagataata atagtacata taatcataca gttgatgtgc ggagtacatg 300
aatttaaaca tctagagcca gggcagggcg gtggctcact cgtgtaatcc cagcaatttg 360
gaaggtggg 369

<210> 1547
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1547
tggtgcagac taacaacaga ggagagctcc taagctatgg taatgagtga cccttacacc 60
agtggcttca gggaggggag gtggtgggat tcctactgaa gaggagaagg aatgagcagc 120
tggtaatgga gtggaaaaac ggggatgcag tgcacccttt caaaagttgg tgatgaccag 180
cagtatgaga gagagaaaat agtagtggag atgaggggtg ggtataaaaa acaccccgaa 240
ttttttttttt agaaaaaaat ggctttaaaa aagtatggta aaaattttgg taacaatttg 300
gtgtttctat tttagcacca ttttgttata aatgttgttt tttttttatt cgcga 355

<210> 1548
<211> 363
<212> DNA
<213> Homo sapiens

<400> 1548
atctaaattt gtcagcaaat taaagagttt gagattggga attgagataa agctatttag 60
ttcttttatg tttaaataat ttacttcatt ctgaaatctt ataaatggat tctcaacttt 120
caagtagtat tctccagata gaagaagagg tggttgctgc tcatgtagat ctataaatat 180
gcggtgtatg ccttttgtgc ttctttctcc gaaaaggacc accccctttt tcccctcttc 240
cgatttcttg tcacctttct cgtccttggc tgcatccatc ccccttccgt tatcccgtct 300

tcgcgtcccg tctttttttct cctgctgtct atcactcttg cctgcttccc cgtcggctta 360
ccg 363

<210> 1549
<211> 356
<212> DNA
<213> Homo sapiens

<400> 1549
taaacgccag atggaagaga tgcatatatc aggaagggta tgagggaagg ggcatggggc 60
cagccactct ccaggaacct gcatgcgttc agctactcag aagctcgtga cgggcaatgc 120
taatatgaat atttatctct tttaagtctt atcatttttc tatcatttct tgatgctaaa 180
acctgcttta taacacacag ttgactcttg aacaatacag gttcgaactg catgagtcca 240
cttatatgca ctgttttttc aataaatata gcgagagtct tttggaaatt tatgacaatt 300
tgaaggaact gtcagatgga ccacatatgg taaaaatatc ataagaatta ctaaag 356

<210> 1550
<211> 381
<212> DNA
<213> Homo sapiens

<400> 1550
cgttgctgtc gcctaaggta gcaaaactag tagctggaag agccaaaatt tgaactcaga 60
tctctctggc cctactaaat gcatcaccat aaattatttc atgggcaatc tttccctgca 120
ccttaattga tttatttctg ccaaatgtat gtgttcctag atctttatgg aatattctga 180
catgggaatg cccccaggtc tgtgaggact ggcttctctg gggttgtatc aatagatgaa 240
ggaaaatttt gcagttgttt atacagtttg gggggttgag gtggtacaat ttgcacattt 300
ttgttccttt catagcaaat tcttcagttt tctttgatga ggccaagcaa taaatttttt 360
cctttcttac gagcaaatac t 381

<210> 1551
<211> 377
<212> DNA
<213> Homo sapiens

<400> 1551
ggcacgaggg gaacgtggct ttccctgcag agccggtgtc tccgcctgcg tccctgctgc 60
agcaaccgga gctggagtcg gatcccgaac gcaccctcgc catggactcg gccctcagcg 120
atccgcataa cggcagtgcc gaggcaggcg gccccaccaa cagcactacg cggccgcctt 180
ccacgcccga gggcatcgcg ctggcctacg gcagcctcct gctcatggcg ctgctgccca 240
tcttcttcgg cgccctgcgc tccgtacgct gcgcccgcgg caagaatgct tcagacatgc 300
ctgaaacaat caccagccgg gatgccgccc gcttccccat catcgccagc tgcacactct 360
tggggctcta cctcttt 377

<210> 1552
<211> 397
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(397)
<223> n = A,T,C or G

<400> 1552
cgttgctgtc ggagattgat agaggcagaa aggaagcgga ttgctcagat gcgccagcag 60
cagctagaat cggagcagtt tctgtttttc gaagatcaac tcaagaagca agagttagcc 120

cgaggtcaaa tgcgaagtca gcaaacctca gggctgtcag agcagattga tgggagcgct 180
ttgtcctgct tttccacaca ccagaacaat tccttgctga atgtatttgc agatcaacct 240
aataaaagtg atgcaaccaa ttatgctagc cactctcctc ctgtaaacag ggccttaacg 300
ccagctgcta ctctaagtgc tgttcagaat ttagtggttg aaggactgcg atgtgtagtt 360
ttgccagaag atctttgcca caaatttctg caactgn 397

<210> 1553
<211> 396
<212> DNA
<213> Homo sapiens

<400> 1553
cgttgctgtc ggaggaagga gattctggcc aagctggaga agctgcggaa agtaacaggc 60
aacgagatgc tgggcctcga ggagggggac cttgaagacg acttcgaccc tgcccagcac 120
gaccagctca tgcagaagtg ctttggggac gagtactacg gggccgtgga ggaggagaag 180
ccacaatttg aggaagaaga agggcttgaa gacgactgga actgggacac gtgggacggg 240
cctgagcagg agggagactg gagccagcag gagctgcact gtgaggaccc caacttcaac 300
atggacgccg actacgaccc cagccagccg aggaagaaaa agcgcgaggc ccccttgacg 360
ggcaagaaga agcgcaagtc gcccttcgtc gcgggc 396

<210> 1554
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(386)
<223> n = A,T,C or G

<400> 1554
cgttgctgtc gccaatgtgc ccttcctggt ggccctggcg ctcctgagct ccgtcctggt 60
gggccttgtc ctggtccccg gcctcctgca ggggccgctg gcgctgagga acatcactga 120
caccggcttc aagctgctgc tgctgggtct ggtcaccctc aacttcgtgg gggccttcat 180
gctggagagc gtgctagacc agtgcctccc cgcctgcctg cgccgcctcc ggcccaagcg 240
ggcctccaag aagcgcttca agcagctgga acgagagctg gccgagcagc cctggccacc 300
gctgcccgcc ggcccccctga ggtagtgcag gcccacgggc accccagaca ctggaactcc 360
ctgcctctga gccaccaact ggaccn 386

<210> 1555
<211> 392
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(392)
<223> n = A,T,C or G

<400> 1555
ggcacgaggc aagctagggg ttcggccccc tgcctctggg caggaaacct tctggcgaat 60
tccagccaag ctgagtccta cccagctccg gagggcagca gcttctttga gtcaaccaga 120
ggaggaacag aagctgcagc cagagctgca gcctaaagtc cctggagagc aaggctctga 180
tgaggagcac tgtaaagagc accgagcaca agccctgagg gccctcttgc tagcccacaa 240
gaagaaagcg ggcctggcat ccccagagca ggaagacgct gttggtaaag agccgctgaa 300
ggcagcaccc aagaaacgac aattgctgga cagcgacgag gaacaggaag aagatgaggg 360
caggaacaga gcaccagagt tgggagctcc an 392

<210> 1556
<211> 261
<212> DNA
<213> Homo sapiens

<400> 1556
ctgactttcc ttatcaacat cccagaaagt cttcagcttt aataatgctt cgccttcctt 60
gcttttctag aatcatattc taaaaagaca aagcaaaaca gataaaccag tgtccctaat 120
acaatatatt catttaaaac attctaacat cttgggatgc tctgatactt ggtcttattt 180
ttctaatctc cttatattta ccatcaaaag tatatgtgtt gagcatggta ctagtataaa 240
aagcacatag accaatggaa c 261

<210> 1557
<211> 331
<212> DNA
<213> Homo sapiens

<400> 1557
tacggctccg agacgacgac agaagggctg aaggaaaaac agatccctcc ttcttgtttg 60
actttgtata gaatgaattt taatgtaact gagcccacct ttagtatagc tttttctcat 120
tataaataga agtggttgcc agtattcttg cttgcctttt aaaatagcaa acatttagtg 180
ataaaaatct tgttctgttc tctgtatgtc agtttattca tctgtaaagt agagacaata 240
atagcatcta tttattacaa gcaattgtta aaattaaaaa caggctgggc gcggtggctc 300
ccgcctgcaa tcccagcact ctgggaggcc a 331

<210> 1558
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1558
caggtccgaa gttggaccca ctattcctct ggggcaaact gacattggct tgattgggca 60
tggtggctaa ggcctggctt tatagcactc cgttatgacc tggaatgtgc atcacttcaa 120
caacagatgc attcatctta cggtccaaca tgaggaagac gtgtgtcatg ttaaatacaa 180
aaattatcct ggcgtggtgg cacatacctg cgatcccagc tactcaagag gctgaggcag 240
gagaatcact tgaacccagg aggcagaggc tgcagtgagc caagattgca ccactgcact 300
ccagtctggg cgacagagag agagagactg tctca 335

<210> 1559
<211> 371
<212> DNA
<213> Homo sapiens

<400> 1559
taccgctgcg agaatacgac agaagggaaa ctatctgaac tggctttatt cactcttcag 60
catatttaag ttggatttca acctctgtca ttccactgaa atcactcttg tcaacaacct 120
tcatgttgtc aaattcaaaa cacagtcttc tgtcctccgt gctcattttt tcaacagtcc 180
ctgcttgccc tttaaaggac ttcttttgct tcagttaccc ttttaggtat tgtcatagtc 240
ctctggtctc tcatgagcag gatttggcag ctccttgtat tctatcagtt cgccaaatag 300
atatttgaga tgacatcaca agttctcttg tctttctact tattttaaaa gatggtatct 360
acacattttt t 371

<210> 1560
<211> 331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 1560
gcactacaca tagttatttc tgaaaagaaa tcagtatgta aatagaaatc caacagaaat 60
gataggtgta ctatcaattc tttattgttg ggttcgaaag caatcacttg aggttaaaag 120
ataattttaa aatattaata ttctcatatt tactattttg gtcccaatgc atgtgtatac 180
caaaatagta atatgtagca cacatgattt aattgctctt ttcaaaaaca cttaaaagga 240
atctatgttt aaagaatatt cacataatca tacaggcatg gtggctcact cctgtaatcc 300
cagcactttg ggaggccgaa gtgggtggat n 331

<210> 1561
<211> 338
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(338)
<223> n = A,T,C or G

<400> 1561
acaagggtaa ggaattagtg tgctaatgtt ctctgcttac aaagtgggaa gtcagttggc 60
tttctagggt ggctgggaca aaatatgaga cttaagcatg ttgattaaag atacagaggt 120
gaccagtaga agaactaaga atagtgatgt cactatgggg gagaggggta gatgagctaa 180
attcttgtct ttcatagcag taggttaaaa gtaaatgtcc aaagctgatt agtaagaaat 240
agcagttgag ggcacggtgg ctcatgcctg taatcccagc actttgggag gctgaggcag 300
gtggatcacc tgagttcagg agttgagact aacctggn 338

<210> 1562
<211> 343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(343)
<223> n = A,T,C or G

<400> 1562
gatatctgaa aaggaggtta atcgatagct tttacatagt acaactgctt tatcctttca 60
aaagcagata cgtcaatcaa aacttgatat ttatttatct atatttatgc tgagttccct 120
taaaatgttt tgtctttttc catataacca atcatattat ttcctaaaaa taaacttagg 180
tattgtcaca gggatagtaa cttctgcttt ccatattgtg tgtgtgtgta ttttgttttg 240
tttcgttttt ttgagatgga gtctcactct gtcgctaggc tggagtacag tggcgctatc 300
ttggctggga ttacaggtgt gagccacggc gcccagcctg tcn 343

<210> 1563
<211> 344
<212> DNA
<213> Homo sapiens

<400> 1563
agaatcccag aagagaaatg gaaatcataa gagaaacaaa ttgaaattct agaactgaaa 60

atataatatc agaaaagaaa aaaaaattac tcaatggaaa ttagagatga ttagacactt 120
cgaaagaaag tatcagtctc actcacactg aagaacagag aataaaagat agaaaatatt 180
aaccagactg cagagaactg tgggacaata gcaagctgac tgaaatatgt gtgattgaaa 240
taccagaaag aaaagagaga gagagagcat gaagtaaaat atttttaaaa gaaataggat 300
ttttaggccg ggcgtggtgg cttacacctа taatcccagc actt 344

<210> 1564
<211> 332
<212> DNA
<213> Homo sapiens

<400> 1564
ctcgacccca cgtcacgcct tctagaaccc tccacctcag gccgctcggg ggcatgccgg 60
gatttgttgt gtgtagaggg ccgctgccgc gagggatgcc gggatttgca gtccttccgg 120
actacaagca aaatggctgc ttctcgacct cttagctggg gcttagggtg tctctggctg 180
gccaagagta tgacctaggt tcaaatcctc actccgcaag tttcgtatct cagtttccac 240
agtagtaaaa tgagataata atagtacata taatcataga gttgatgtgc ggagtacatg 300
aatttaaaca tctagagcca gggcagggcg gt 332

<210> 1565
<211> 343
<212> DNA
<213> Homo sapiens

<400> 1565
ttctaattag tagaaataag ggctaaggaa tctttggatc actgaaatct aactattctt 60
taattgaaat gtgggtatgt ttctgactta tagtaagaac taaaatgaat tctatttatt 120
ctcaagtgag agcaaagaga aaaattttaa atggcataat aaagagctta taaaacaaaa 180
tatgaggatt ttggaaaatc atttattgaa atagtactag gatatttaga agtatttaga 240
agcttaaatt aattggcttt tctttatgac attatctcta ttacgataat attatattat 300
tttttaataa aggccctaat ggaaatctca aatagggttg gtt 343

<210> 1566
<211> 375
<212> DNA
<213> Homo sapiens

<400> 1566
cgttgctgtc gatagagagg agataacttt actaaaatca tacaacacag aattagatta 60
atcctagcag agctaatctc agacctttac tcagactttt tctgtagctt tagtctagaa 120
gttggcaatt catctattat ttgtcactga ttcctagcat gatttgtagc aaattcttta 180
ttcttattgt gcctcagatt ctacctatat aaaatatatg tgacttaaaa tattcataaa 240
gataataaga acaacttcaa tttctatttt atttttactt acaatagttt tcactttcac 300
atacattacc ctacttaatt ttccccatat tatggatgag gaagttaaag ctctatgtgg 360
tagatgtcac atcca 375

<210> 1567
<211> 141
<212> DNA
<213> Homo sapiens

<400> 1567
gaggaattaa gtgagtaaaa aaggcaagct acagagtggg agaggatatc aaggatacat 60
gtatctgaca aataatttat acagaatata tttttaaact ctcaaaaatc aatacacaaa 120
agacaagcta ccctccaaaa c 141

<210> 1568

<211> 327
<212> DNA
<213> Homo sapiens

<400> 1568
tcctcaaata tcttcttgtc ctggaagcct aaagtgactc cctacacaga gggagtagaa 60
ctgtcttgtg gtttctcaag cacagctctc tattttaatg catatatgaa gctgtctttc 120
atctgtgcag atgtttgctc tgccagactg tgagctcctt gaaggtgggg attttgtctg 180
gttgtttttt ccccagaata agaatgctgg gtatatacat gtctagataa tggtttagat 240
ggatggatag atggtgaatg aatggatgag tatatgtatg gggggtata aggaagggcc 300
tcgttttttc tgccggaaac acactct 327

<210> 1569
<211> 344
<212> DNA
<213> Homo sapiens

<400> 1569
gcctctcact cataggaggg gcccaggaaa gagggaggag gcaagaaggg gaaggagcac 60
aaggagtgtg ggtgaggggt gtaaccatga gggcaggcag ggggcaggac ggaaggcagg 120
agggcctggc caggggaggc ctcaggagga tgagcaggag gcgagaggag acagactatg 180
aggccagagg gagaccctca cctgagaatc tcctttagcg tgcggtgcag gaatgcataa 240
ttgtcatcga atttgtacca aggcatgaat ggctgacctt cactgtacac aaagttttcc 300
cagcagtatg caaattctga gacgaagagg caggaagcag tcag 344

<210> 1570
<211> 321
<212> DNA
<213> Homo sapiens

<400> 1570
agtcatataa cccaactatt taagtaatta tcaagttgct tcacttctat gtgccttaaa 60
ttcctcgttt gtttaatgag ggttataaca acactgacct cataagggca ttctgaagat 120
tagatgaatt tatacgtagg tagtaattaa aacagttttt agtacacaga aaagtactta 180
gtaattttta gctgttatta ttactagaag ttcattcttt tgttcattaa ttcatgaggc 240
acaggtgcct ttctcggtgt ttggcataca taaaacacca taataaatga gagtccatat 300
tcttatgcag agtgagaaga a 321

<210> 1571
<211> 345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(345)
<223> n = A,T,C or G

<400> 1571
tacggttgtt atagacgaca caaaggatca ttaaattaca ttttaaaatg ttaacaacta 60
caagcagata catctgggat attggttatg agaggatatc attttctttt cttaccataa 120
ataaatatta tttatttttat tgaaattgtg cttttaagaa tgctatagaa aattcaaaag 180
gaggacaggt gcagtggctc atgcctgtaa tcccagcact ttgggaggcc gaggcaggtg 240
gatcacctga ggtcaggaat tctaaacctt gccagtatgg gtgaaacccc gtctctacta 300
aaaaatacaa aaagttacca ggcttggtgg catgcccctg tagan 345

<210> 1572

<211> 313
<212> DNA
<213> Homo sapiens

<400> 1572
gtagtcctag ctattcatca agctgaggcg ggaggattgc ttgagcctga aaggtcaagg 60
ctgtagtgag tcatgatcat gccactgcac tccagcctgg gtgacacagc aagaccctgt 120
ctcaaaaaaa taaaaaatta actaaataat ttttttctcag ttttaattcc taatataaac 180
accaatagat ataacaaact gaaacaaaag ttctttaggg tgcccaataa tttttaagtg 240
tgtaagggga ttgtataacc aaaatatctg agaagcatta acttaaaact aataaaggag 300
aaagacttta tta 313

<210> 1573
<211> 313
<212> DNA
<213> Homo sapiens

<400> 1573
gttagtaaac ataccattat aatagcaatc ataaaggtcc caagaaataa atctgacagc 60
tgtatcaaat atttgaggaa aaatgaacct ttattaaaat cgttaaataa tacttaaata 120
tagataaatc tgttattgaa aggaaggcaa tgttataaaa attcagtctt cccaaattaa 180
tctataaatt cccactcaaa ataagtttga tcttgacaga gtgatttttt ttttcttttt 240
ttttttttaaa aagggagtct gactttgccc cccaggcgga agggcagggg aacaaccacg 300
cttaaatgaa gtg 313

<210> 1574
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1574
ccctgcatgc ctcctcatcg gcagttgaga ccccactgct gcctgctcct tcccattcca 60
ttgcggggac ctggacttga tctagccctg tctggtggac acacttttgt aggtgccagg 120
agggaggaat ctgctcctcc tttctgcccc cgacagcccc cagccccagt ggccactcac 180
tcccagcatg ccttgcagct gcctgagtgg gagactgtgg tggactcgga gctggggcag 240
ggaggacaag cttcttctgg aagggcaatg ggcagagggt gacctggtct ttcacggtgg 300
tgtcaaggac catagagcca ggccac 326

<210> 1575
<211> 314
<212> DNA
<213> Homo sapiens

<400> 1575
gttcaaatct ggtctcccac atgttagcta agagacctac aaattatgtt atgttacctc 60
tctgtatctc agtcttctca tctggtaaat taagctcaat aaggacagag actttgttta 120
ctgtcataaa tatcatcagc acctagaaac atttgttgta ctgaatgaat acctgtgcag 180
tgaatgaagg gaagaaatat ttcataaatg ttgtggtaag attcacgtga gttaaaacat 240
ataaagcact aagaatagcc atggcacaag aaatgctcca ttaatggtaa ttattattat 300
ttcagcaggc aagg 314

<210> 1576
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1576

ggaagttggg tcatatccat gaatctgttt ctgcctagtt aatatgtaaa ctttgacgga 60
aatactttac gaaaaatttg atgtaacgct atttcaattt ttagatacaa ccattttaaa 120
aatttgaata ccacccaaaa cccgatgaaa tggattaggg aaagataaaa aaacaaaaca 180
ctaacaaaat acttgactca tctcacactt tatagcccaa gaaggcttta agtaaataag 240
gtgtaccatg ttttatgtaa aggctcgggg tatgacagaa acacagtgtc ccagctgatc 300
tcatagatat caaacagacc tt 322

<210> 1577
<211> 316
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(316)
<223> n = A,T,C or G

<400> 1577
catgttcttt ttgccactaa gcagcgtggc ccacagcagt ctcagtatcc gctacgccct 60
agtctgtcca tctgtgagat gaagatgaga gaaattgcca caggaccttg tagtgcacta 120
acagcttgga gttttttagc catgtaaaga attaaaatga ggatcatctc tttatcataa 180
gattgcctcc tcttgtaaag taagtcactg aataagaaat gatttaccac agacaagcaa 240
atgctgagag attttgtcac caccaggcct gccctaaaag agttcctgaa ggaagcacta 300
aacatggaga ggaacn 316

<210> 1578
<211> 291
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(291)
<223> n = A,T,C or G

<400> 1578
cacaggatcc agggaaaaaa aacaaccaaa taatacttga aggtaagtcc caagatgtca 60
gctatgaagt aagcagtcag tccagattgg agcagaagat tggaaggttt caggggggact 120
gcttccaggg aaaaataaaa atgataaatt attattttca ttttccatgc aacaaatatc 180
tacggagaat atattatgct ttgagcctgt tagaggcact caggctatag ttatgaacaa 240
aattaagttt ctgacttctt gaaatttacc ttctactgaa acttanagtt t 291

<210> 1579
<211> 134
<212> DNA
<213> Homo sapiens

<400> 1579
gagggtaaga ggggagccag gagtgggaag ctggggaagc cagagcagca gaggctggag 60
caaatcccgt gggaaagaac caggaatggg tggttcctga gggagtggct caaacaccct 120
cgcaggggggg tggg 134

<210> 1580
<211> 320
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(320)
<223> n = A,T,C or G

<400> 1580
tcaggaattt atcaggctgg ttagactctt tgtaacttga aattagccat ggttggagta 60
tacacatgga tattggaaaa tactataaat cagaactatt cctggttaat atgactacat 120
atgaagacca aagcacagta agggtttctg ttgttagaca aaatcaaaca aaagggaaat 180
gttttttgac ataaactata gaataagaag atatgaaaca aacataaata tacattgcat 240
ataataacaa ttattattac tatttttgag aaggagtctc gctcttgtcg cccaggctgg 300
agtgcagtgg cgcacgatcn 320

<210> 1581
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1581
tcactgggcc ttaggtgact ggaggcctgg ggtctggcgg ggccagaagg attaggcctt 60
caggtggcca aggagacctg gtagccagct tcaggacaac tggaagtgaa caggtgatga 120
ggtgggactc tggactgagt ccagccagaa ttccccagtt cttggaatag aggtggtagg 180
gtggccagct aggatgcccg acaattccca gcaggtcctg ctctgcctgt cacagcagac 240
agacatggcc agctgaaatg gcacctgcca attgggattg aaaaataaaa atctggccaa 300
gcgcagtggc tcgctcatgc ctgt 324

<210> 1582
<211> 304
<212> DNA
<213> Homo sapiens

<400> 1582
tggggattgg gttaacgtat ataaaatatt agatggtggt aagaagagct aataagtgtt 60
tgctaaatat ataagcccag ggccagcctg gcttcctcct catcctcctc ctgctcacct 120
ggcctggacc ccaacctctc ccctagcact gagctcactg cccaggtccc acagcagcac 180
tccaggcctg gactatttct acagccatct ctctgcacct gtctttgtcc gttgctgcag 240
ctacaacaaa atatcataca ttgggtgctc tggccaggcg cggtggctca cgcctgtaat 300
ccca 304

<210> 1583
<211> 315
<212> DNA
<213> Homo sapiens

<400> 1583
ggaaaagtag tgttggggga tttgctatat gagaagtcaa agcatactga aatgctgcag 60
taatataaat ggtgaacaca agaatagaca gattgacgcc tggagcaaag tagaatccag 120
taacagaccc atttttatat cagaatttag tatatgataa agttggtgtt ttgcaacagt 180
tgggaaatta taattcagtg tgttgtatag ggataaatgg ctctttattt agaaagaaag 240
atcctacttc acattcaaaa taacttagat ggattaagga actaactaaa aaaacctata 300
aaagcattag aagga 315

<210> 1584
<211> 270
<212> DNA
<213> Homo sapiens

<400> 1584
tacagacaca aatgaatgaa gagacctgcc ttatggaggg ggaagagtgc tccagtctgt 60
gggaacagca ggcaggaaga ccttcaggca ggaacatgct tgactcttcc atctgagggt 120
cagaaatggg ggccctatga ttgaagcccg tgaccaggga gtgggtatta gcaggaaatc 180
caatgagaag ggtaaccagg agccttcctt ttctcttcat aaaaatttgt aggattgtca 240
ccagaaatgg ggcctgatcc agatcccaag 270

<210> 1585
<211> 336
<212> DNA
<213> Homo sapiens

<400> 1585
tattcctgtt ttgagacaaa agatcgctct gatgcccagg ctgccattat tggtggctta 60
atttgcttac attaaaggaa tgactatatg ttgtggctaa aactacctac tttaacgact 120
gaaaaaccaa acattctttg caaaaccatg tatgataaag aaggtaaaaa catttttcat 180
tttctagaca cttaaagaca ctgaatttaa agcagattaa gtagcaaaaa cattgtcagt 240
aaaaatattg ctgaatagga catgatgagg tagttattat tcaaatcact gatggagact 300
acacacacat atagttataa agacacatgg tactgg 336

<210> 1586
<211> 376
<212> DNA
<213> Homo sapiens

<400> 1586
tctacaattg tgtggtacta cctttatatt gagctctttg ctgatattta ttatataatt 60
tattataaac aataattcat aattttatag ttcatcatct gatggtgttc accttcatta 120
aagactacat aagtctaaat tctaaagaaa gttgcatgca gcatctcatg cctatagtcc 180
cagcaatttg ggaggctgag gtgggaggat cacttcagcc caggagtttg agaccagcct 240
ggacaagata gtgagacctc catctctaaa ataaaaaaaa caatagccag gcatgctggc 300
gtgtgccggt ggtcccaact acttatgagg ctgaggtggg atgatctctt aaccctaaga 360
gtccaaggct acaatg 376

<210> 1587
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1587
cgttgctgtc gagccaactc ctttctcccg agcctgctgg cagatcctcc cccacctctc 60
cgcaggagtt cccctcctag gctgggagca tcccgtgcag ggtaaatctt ttcaagccac 120
caactgctgt ccccaaggaa atggtgtccg aaaaatccca ccttggcaac ccccaggagc 180
ctgtgcagga ggagcccaag acccgcctcc tgagtatgac agtccggaga ggcccacgga 240
gagagctggt tgttaaaaag agcctgggca ggccaggcac ggtgactcac gtctgtaatc 300
ccagcacttt ggaaggccga ggcgggtaaa tcacctgagg ttgggagttc aagaccagcc 360
tgaccaacat ggagaaaccc catctctact aaaaatacaa aa 402

<210> 1588
<211> 395
<212> DNA
<213> Homo sapiens

<400> 1588
cgttgctgtc gcctttctcc cgagcctgct ggcagatcct cccccacctc tccgcaggag 60
ttcccctcct aggctgggag catcccgtgc agggtaaatc ttttcaagcc accaactgct 120
gtccccaagg aaatggtgtc cgaaaaatcc caccttggca acccccagga gcctgtgcag 180

gaggagccca agacccgcct cctgagtatg acagtccgga gaggcccacg gagagagctg 240
gttgttaaaa agagcctggg caggccaggc acggtgactc acgtctgtaa tcccagcact 300
ttggaaggcc gaggcgggta aatcacctga ggttgggagt tcaagaccag cctgaccaac 360
atggagaaac cccatctcta ctaaaaatac aaaaa 395

<210> 1589
<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(384)
<223> n = A,T,C or G

<400> 1589
cgttgctgtc ggggagcacg ttacgtccgg acgcgtcggt ggtagggctg ggtctccgaa 60
cctgaaaccg ggagcttcct gctcgtgttc gctgttgaga agctacccgc ggggttgtag 120
acttcggacc tcatggcaga gataattcag gaacgcatag aagatcggct cccggaattg 180
gaacagctgg agcgcattgg actgttcagt catgcggaga ttaaggctat cattaagaag 240
gcttccgatc tagagtacaa aatccagaga agaacccttt tcaaggaaga ctttatcaat 300
tatgttcaat atgaaattaa tcttttggag ctgatccaga gaagaagaac acgcattgga 360
tattcattta agaaggatga gatn 384

<210> 1590
<211> 437
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(437)
<223> n = A,T,C or G

<400> 1590
ctataataca gctacttgtc ttttgcggnt acatcgattc gaattcggca cgagcacaca 60
cacatttaca cacgcaggac tctggagcca gagtagaggc tgtggcccag gcactacctg 120
ctggctccca cctatggttt gggggccata cctgttccag ctctgttccc agggtggggc 180
agggaggtgg gggttggggg agtantgnnn nncnttttnt tntattcttt tccctttgtg 240
ttttacgttt tgacttacat ctcatccctg attggctcgc tcatatcttt aaactggtgt 300
tgttatcacg tgctgcgtat caactgacct tcatactcgc ctctacctgt cctctctctc 360
tctcgtatta atagtttttt ttttttctaga atcttctgta aatccgaggt tatgatctgg 420
gtatgctcac tatgacc 437

<210> 1591
<211> 450
<212> DNA
<213> Homo sapiens

<400> 1591
ggcacgagca gggaccaaga tggatcttct cctcgacatc agctaagcct ggaggactct 60
tcccctcaga gaccatggag agggacagcc acgggaatgc atctccagca agaacacctt 120
cagctggagc atctccagcc caggcatctc cagctgggac acctccaggc cgggcatctc 180
cagcccaggc atctccagcc caggcatctc cagctgtgac acctccgggc cgggcatcta 240
cagcccaggc atctacagct ggtacacctc caggccgggc atctccaggc cgggcatttc 300
cagcccaggc atctccagcc caggcatctc cagcccgggc atcttcggct ctggcatcac 360
tttccaggtc ctcatccggc aggtcatcat ccgccaggtc agcctcggtg acaacctccc 420

caaccagaga gtaccttggt agaacaaccg 450

<210> 1592
<211> 336
<212> DNA
<213> Homo sapiens

<400> 1592
gggagggcct attctcacgt ggatggagga gggtaatggg acccacccaa gtggggcata 60
ggacccccaa gactctatgg ctttcactca ccattcattg cctatctctt caccaacctg 120
agtcacttct tagtttcatg tttctttcta tatctctgag attataacat agctgacaag 180
ttcaatgaag tcttactaag ggtagtatta gtattgtgct caacagttga cctggagcat 240
ctttcttaat cctttgagag gtgctgtgat tgtctccact gtccaggaaa gaaaactgaa 300
gattaaaaag gttttgggcc tggcatgggg gtcatg 336

<210> 1593
<211> 373
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(373)
<223> n = A,T,C or G

<400> 1593
cgttgctgtc ggccaggttg gacttccggc tccgtccttt gataactgtg tgctcttggg 60
caaatttctt aacttgcagg ttcttgtgag gataacatga gttaattgag ggcacttaac 120
actacctggc acagattaag ctcatctgaa gtgggagctg ttacttaggg gcgtttgcct 180
agaacacagg gtccagaggc tctctcccgg aaacttagac ccagtgagtc agaagtgagg 240
cctgcaaaaa gcagcaggag tggggttaag aattccagcc tagggctgga tgcggtggct 300
caggcctgta atcccagtac tttgggaggc ccgaatggga ggatggcttg aggccaggag 360
ttccagacca gcn 373

<210> 1594
<211> 349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(349)
<223> n = A,T,C or G

<400> 1594
accaatgggg gggggcgaga caattacttt acaaaaataa aaatgtaaac tttctgcctt 60
taatgtttag tgcttaacca ccaatctctg ctcctgtctg taaaagtcag acttcattaa 120
ttttgctgac acagtaagtt ctcatggaaa atagtgacaa cagccagcaa tgtgaatagt 180
tacatcttgg ctctgtaaat atcaaaacag actttgctaa gcagaaatca atagacactc 240
gatcaaatag tctggttcta ttttttttatt tttattttaa ttttttgag atggagcctt 300
gctctgtcgc cccagatgga gtgcnnngnn nnnntctcgg gtccactgc 349

<210> 1595
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1595
aggcacctga gagtcacttc tgggcagaaa gacaaacaca tgaatacaag ccataaatga 60
aaagaatcaa ccagttacac cattaaaaat gtctgaatat aatgccagtt tctacgagtg 120
tggagggtgc atctctgaga tggtgaattt cttcccacct aaaagcaggg tgacctagga 180
ggaattcgta gtgtcctttc acttattttc agacaggctc aagattactt tcaataaata 240
agtataattg ttcataattt gaagaatgta cttacctgat gacatgactt taaatgtcaa 300
aaagctaaaa gatcacacac caacaccg 328

<210> 1596
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1596
cttcgtgacc tggactgaaa acattttcaa gttctctatt tcggtcaata cagccccttt 60
aataattccc caaagcatct ccccttccag cctgtgctac gactctcttg cacacgtttt 120
gtattcccac agatcacaaa atcacaaagc accggagctg gaagaatctt aagagataat 180
ccaaggccag gagcggtggc tcacgcctgt aatcccacca ctttgggagg ccaaggcggg 240
tgggattacc tgaggtcagg agttcaagac cagcctggcc aacatggaga aaacccgcct 300
ctactaaaaa aacagaagtt aaccccgcct cggcccgc 338

<210> 1597
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1597
gtcatttttat ccattcacct tttaggacac tttggttgtc aacagtgttt tgcaactatg 60
aatatagctg ttatcttact ctttttttaaa atgcacttta ggtgtactca ttccttaggt 120
tgagtacacc taaagtgcat tttagataca ctaatcatct ctgtttctgt aatgtcatta 180
tcattaaaaa catctcattg tgttatattt atatgctcat aattcttttt ttcttgtagt 240
caactgtaaa tctcttaagg acttagacca tgtctaatac atctgtgtat tcctggctcc 300
taaactggat ttcagagatt atttttagct gaatgaattt gccaggcagt gtatg 355

<210> 1598
<211> 329
<212> DNA
<213> Homo sapiens

<400> 1598
atttacaata agtttacaat ttacaataaa gctttaaaag aacaacaaaa aattaaatat 60
acctctattg cttgtacgtt tttctacttt tgatagaaac atggacatat taaatatttc 120
acttttaact ctagtataag aaagtcaata atgcaagagt gatgataaag agcaactctc 180
acttggcatc atgatcaggg agcaataggg agtgggtgac tgcggtgacc taaagcatac 240
aagccttgtc taaagtgaac agctgctctc agccctagct cataagtgcc acagagtcta 300
caggcctaga cctgctgatc cccagcatt 329

<210> 1599
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1599
caaaacataa atgtattact caaaatgttt tatatagggg cacaagagtt ctttgactga 60
agcagttttt attttaagtt gtttggcctg aaaccattcc tggcagcaaa aatcttttta 120
aaagtcttca tgtgtagatt taagctatcc ttggcataaa ataattaata tatctatatt 180
tcaaagagca gatggcagaa aggactatac cgaaatatat tttatttctg agcaccagca 240

taaaaacaag agaaaaaaaa agaacagcca gaatacagag gtttttaggg ctattctaag 300
tgatactata ctggtggaga catgtcatta tatat 335

<210> 1600
<211> 124
<212> DNA
<213> Homo sapiens

<400> 1600
ctttcactac atattaaatg acactttata actaatataa taggacaatc atcaatgcat 60
atatagccag cccttcatat ctgtgggttt tgcatccagg attcaaccaa ggaggaattg 120
aaaa 124

<210> 1601
<211> 348
<212> DNA
<213> Homo sapiens

<400> 1601
cggggttgat agggaaccag cgcattgaat atccttcctt tacattcatg gtactactcc 60
ctgatctcac tatgatgacg tagggcacag ccttacttaa tgcacacaga atggggctct 120
caagccaaat aggcgtctga acagactgga tctactagaa cagaaattct agggactgaa 180
ctttctgtga cacagagatg gctttttttt ttgagggtct cgttctgtca cccaggctgg 240
ggggtggcac aatcttgact cactgcaacc tccggctcct gggttcaagc cattctcctg 300
ccttagcctc ctgaatagct gggattacag atgtgcacca ccatccct 348

<210> 1602
<211> 337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(337)
<223> n = A,T,C or G

<400> 1602
atcgtatgaa ctacaactat taaaatgtga aatgcatgat gcaaatagtg cacaaaaaaa 60
tagagtgaaa atgatgaata cagccataaa agacagccaa actccatttt agcaataaag 120
taaaatataa tctgctgtca ggggaaggta atttgaagta cttgagatgt tctttaattt 180
aaaaatccaa aaatattttt agctttagtt actataaaac atgtttaagc attttccatt 240
tgaaataaaa ttttaatttc atgctttgtc agtttcccta aataaataga aaatagtaaa 300
atatcgcata ctanaaaaat caacttcttt ggtaata 337

<210> 1603
<211> 358
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(358)
<223> n = A,T,C or G

<400> 1603
atctgataag attattttaa ggacagaatg aagatttcct cttgaatgat ttgctctgcc 60
ctttatcaaa aagacatgtg tctgtccacc ttaacatttc tggtataaat ataccttgtc 120

ctttaaaaat tactgcataa cattaaaatc acgagcattg ctatacatca tcaacagtca 180
agccagagag ccaaatcagg aatgaactcc cattcacaat tgccacaaaa agaatcaagt 240
acctaggaat acagctaact atggaggtga aagatctcta tgaggagacc tacaaaccac 300
tgctcanaga aatgagaaat gacacaaata attggaaaaa cattccatgc tcatgggn 358

<210> 1604
<211> 417
<212> DNA
<213> Homo sapiens

<400> 1604
cgttgctgtc ggtaagagaa ggagaaggag aagggattaa gttttaccta gtcacatagc 60
caatgtcaga ttcctaacta gtggccgggt ccgtctgatc caatgatcac tattctctca 120
tttatggtgt agtcactgtg tggcttcaac cacagtggac ctctctggac ctaagtgccc 180
tcacttgtaa attaaaagaa ctgggttagg gccaggcatg gtggctcatg cctgtaacca 240
cagcactttg ggaggctgag gcaggtcggt cacttgagct caggagttca agaacagcct 300
gggcaacgtg gcaaaacccc gtctctacca aaaatacaaa aaattagcca ggtgtcatgg 360
tgtacatctg tggtcccagc tactgggagg ctgaggtggg aggatcactt aatcccg 417

<210> 1605
<211> 379
<212> DNA
<213> Homo sapiens

<400> 1605
cttcatgacc tggactgaga acattttcaa gttctctatt tcggtcaata cagccccttt 60
aataattccc caaagcatct ccccttccg cctgtgctac gactctcttg cacacgtttt 120
gtattcccac agatcacaaa atcacaaagc accggagctg gaagaatctt aagagataat 180
ccaaggccag gagcggtggc tcacgcctgt aatcccacca ctttgggagg ccaaggcggg 240
tgggattacc tgaggtcagg agttcaagac cagcctggcc aacatggtga aaacccgtct 300
ctactaaaaa tacaaaaatt agccaagcct cggccggaca cagtggctca cgcctgtcat 360
ctcagcactt tcagaggcg 379

<210> 1606
<211> 382
<212> DNA
<213> Homo sapiens

<400> 1606
tacagttata gccaggttgg acttccggct ccgtcctttg ataactgtgt gctcttgggc 60
aaatttctta acttgcaggt tcttgtgagg ataacatgag ttaattgagg gcacttaaca 120
ctacctggca cagattaagc tcatctgaag tgggagctgt tacttagggg cgtttgccta 180
gaacacaggg tccagaggct ctctcccgga aacttagacc cagtgagtca gaagtgaggc 240
ctgcaaaaag cagcaggagt ggggttaaga attccagcct agggctggat gcggtggctc 300
aggcctgtaa tcccagtact ttgggaggcc cgaatgggag gatggcttga ggccaggagt 360
tccagaccag cctgagcaac at 382

<210> 1607
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1607
ttggactaga gattgttgtt acaagaactt taaaaataaa aaaataatta aaaagactta 60
tttttctgta tcattcttac tggttcattt gtttaatagg acttaagaca tgaaaaaatc 120
aaactagtaa atttgcattc atacttgctt acctacttaa atatatagaa gtaatgcaga 180
tagtggtaaa agtcttgagt agttcaaaca agtctaattg aaatactgtg gattaaaatt 240

ttattttcta ttatttcttt tttcagataa ttactgattt ttaaaatgtg ttgattggcc 300
gggcgcggtg gctcacgcct gtaatcct 328

<210> 1608
<211> 356
<212> DNA
<213> Homo sapiens

<400> 1608
tatctgccaa aatttgtttg gtatatataa cagcttttgg agagattttc actgctatgc 60
ttttctttct tttatgcttt gttatttgga gttttaattt ctcaaatgat ccctttcttt 120
tagatttcaa attataacct atttcctgca ccattgctga cgcctggtga tccatgtcag 180
aagtacttcc aggtcagata cattttctca tatttcaatg cagagaagca gttgaatatt 240
aaaacttaaa aaaagataat gtttaatgtt aaacttatga tttactaaaa taacatgttt 300
tttaatttca ttgttcttca ctaatgtaat agaaaaatga atcttggccg ccgcgg 356

<210> 1609
<211> 374
<212> DNA
<213> Homo sapiens

<400> 1609
cgctgctgtc ggcctggatt acatatttag atcctatctc tataaaaaat caaaaattag 60
ccaggcatgg cggggcatac ctatagtcct ggctatttgg gaggctgagg caggaggatt 120
gctttagccc tggaggtcga ggctgcagta agccatgatt gcgccactgc actcagcccg 180
ggtgacaaag caagaccctg tctcagaaaa aaagaaaatt catggccagt taagacaaaa 240
tgctatgact ttgaaattca cagaaagaaa taacagttta cattacgtct tcaggtattc 300
acgatagaaa taatctcctg aaaaacctga atttcagaga ttcttagact ggctgccaaa 360
ggatgacact agcg 374

<210> 1610
<211> 294
<212> DNA
<213> Homo sapiens

<400> 1610
gatttttgg tacctttctt agggatatca tagtttgaga taccatgaaa gatgttcagg 60
cagagccttt tcaacgaaat caccttgctg tggtcttcac agagtctagt taatagaagt 120
tttgcactgg ctgggtgtgg tggctcactc ccgtaatccc agcactttgg gaggctgaga 180
cgggcggatc acttgagccc aggagttcga gaccagccct ggcaatatgg tgagttcttg 240
tctctacaga aaacaacaat ttacaaaaaa taaataggca tggtggcaca cccc 294

<210> 1611
<211> 358
<212> DNA
<213> Homo sapiens

<400> 1611
gagactgtgc cactgcactt aagcctgggt gacagagtaa gactctgtct cagacaatat 60
tgtgatgata ttgttatttt tgaaactttt ataccgcaga gaacagagag agactgcgac 120
gtatataccc tacaaagggc tttttctctg gtagagcctg gaagggctag aagtaaactt 180
ttaaaaattc aagatagaat cgtgatgagc aagcctcatg cacatgcatg aggatggcta 240
ctaccaaaaa ggcagaagat aacaagtgtt ggtgaggaag cagagaaact ggaactctca 300
tgcagtgggg ttgagaaggt aatatagtgc agccgcggct gggcgcagtg gctcacgg 358

<210> 1612
<211> 377

<212> DNA
<213> Homo sapiens

<400> 1612
ggcattatgt ctttcagata ggatgatgct gattatgttt ggaaatagct aatctttcta 60
agaattgaaa attgttttct acatttttca tccacttaca gatcaaagaa gaaatctgtt 120
ttatatatgt caatttttct atagtggatt gtcttaaaat agagcacgtt tgatttacac 180
cagatttatg ttgtgacatt agttacaaat ttggtaaaaa catttctaat tagagatgat 240
caggtaaatc ttgacaactg ttgagtaact gctagtaatg ctcttgagat ttatttttta 300
tttgatatca gatttataat tcaagtaaat atctgagtag aagctaatgc aaagagataa 360
ttactatatt ctaaggg 377

<210> 1613
<211> 355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 1613
aatggcactt aatcacttaa actaatttaa attaaataat tggttattta aatcatcttt 60
ttcatttatt ctctacttta tttgtttgtc ttcccctgcct gaagggagga gctaactgca 120
ttagaggtgt tgaaattcac cgttagatga tcccctgggct agaatttaa aggatgtggg 180
gatttatcag gtagggaata tagaggcaag gaagatgtag gtgtatgtac tcattcgtat 240
ttaacttgtc cagtttatta agtcatttga attttgtcag aagctagatc acttctagta 300
gtttttaaca aagtaattct caaaaaccca aactattgat ttggtttgcc tcccn 355

<210> 1614
<211> 401
<212> DNA
<213> Homo sapiens

<400> 1614
cgttgctgtc ggtttgcttc aggatgtttg atttaaaaca gaggttcttc cctttccgga 60
cagggtcaga atgacctggg ttctctccaa ggttgtgtac aagagctcca caccttctgt 120
tcagaagacc aaggacagtg gcagatgcca tggcctgttg tgaagcgaag ttggaggagg 180
gagaattcta caacagatgg tttcttggat atctggggcc tgtccagctc tagctttgaa 240
aatgatgggc cagaccttga actggcatgg atacaggctt aagtgccaga acaggaagtg 300
aggtcctagg gtgatgtctt tggggcagct gctgctactc agctggtggg ctggcaccgc 360
tagctttggc ttcctatggt ttggtgagga gattgtgtgt g 401

<210> 1615
<211> 387
<212> DNA
<213> Homo sapiens

<400> 1615
tacggctgtt atatatacga cagaagggcc atacagtagg aggaggggta cctaaccttt 60
cacaaacaac aacaaatgtg aaaagtcagt gacacactgg acagaagaaa cagtgagacc 120
agcaggccat ttaatctaca ttattctctc caggctttta aaaataatta tgccatcatg 180
tgctttttgc tgctattatg tcataattgc cttacatctc aaatcattaa ttaaaatgga 240
ttttaagagt acggaattgg ctgacttaca agatcactta ttaatccgtg cccggatgtg 300
ttgtttcttg cttacagaga caccttgac cgttactctt tcgcggaatc gttcacaatg 360
gcattcttac aacaacagga tatcgcg 387

<210> 1616
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(386)
<223> n = A,T,C or G

<400> 1616
cgttgctgtc ggcagaaatc tacatggaaa aagaaagtta agagtcttcc taatattctc 60
accgatgatc gatttaaagt tatgtttgag aaccctgact tccaagtaga tgaagagagt 120
gaagaattta ggcttctgaa tccacttgtt tcaaaaatta gtgaaaaaag gaagaagaaa 180
ctaagactct tagagcaaca agaacttcgt gaaaaagaag aggaggaaga gccggaagga 240
aaaccaagtg atgcagaaag ttcggagagt tcagatgatg aaaaagcctg ggttgaagag 300
gtcaggaagc aacgcagact cctccagcag gaggaaaaag tgaagcggca ggaacgactc 360
aaggaggacc agcagacagt cctaan 386

<210> 1617
<211> 380
<212> DNA
<213> Homo sapiens

<400> 1617
cgttgctgtc ggcccttaga ttttggagac atcaggcaga tgtctccaaa aatgattgtg 60
atcaagaatc tgaattataa gattcacagt ctgctcccca acccagtgct gccaactgta 120
cagctgcgcc tccacgaagg ggcatatgcc aggctcgtct gaccctggaa tgaggatgta 180
ggaagcaggc agagctccgg ttcagccctc acaatgggac tgaagcagga gagaaggctg 240
ggcagaaggg ctgtggggaa gtagggcttg tctccatgga tgacgtccag aaggatgtca 300
ggaggaggaa tatcacagga gttatagaca ttggagggaa cagagactgg cacaggacct 360
cttcattgca ggaagatggg 380

<210> 1618
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(389)
<223> n = A,T,C or G

<400> 1618
ccaggctggt cttgaactcc tgacctcaag tgatccgccc acctcagcct ccaaagtgag 60
ccaccgcacc cggcctgtta ctctattttc tacttactat ttacaactgt cagaaggtaa 120
atgacaacct gatttttgtt gcttttttaag tcacttatac ctctcactag tgatacacat 180
ctttttttatt tcagaaaatg ttttattata attataacat tttagtattt gttcttttct 240
tttgctttgg cttggttctt tagaaccttc tatttatgta tttgatcttc ttgaactggc 300
ttctatggta gtctctttct ctcaggactt ttttttgtt ttgccacttt cttcatttcc 360
atccaatttt agaaattatc ctcatttgn 389

<210> 1619
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1619
gaggcaagct gcaagaaggc catggggaca atgtgcagag caatgaagcc tcctgcccat 60
agtgactgta cccgcgacct ggtggtgacc aggcaggcat ttgcacctgc tgggctccag 120
agctcccctt ctttcttcac tcggtgacag caaaccaaga cttgggtcac atcatttctg 180
ggtaagtatg cagagatgct gaaagaacag tgggagcaaa aagaacaata ttcttgaacg 240
tctttctgttt tctctatgac ccttagaaac ccaaagaaaa tttcacagta ggaaaataat 300
ccattgcaca aactgtattt ttaaaggg 328

<210> 1620
<211> 374
<212> DNA
<213> Homo sapiens

<400> 1620
tacgcctgcg agaacacgac agaaggggct gtcagccacc cgcagtgctc tttctctgaa 60
agtggtttgg aagactggct accatctggg tgcgaggaat cattagcagc gaggccaagt 120
ttgaggagcc tgagaggagc tgtgcgccaa gaggagggtt tttcttttcc gagaatccag 180
aggcccttat tatctgcttg ctttctcagc tgaacccttg cccccggatc ccccagcaaa 240
gccctctgag gcggattttg tattcatcct gtgattgatc cttcagatat ctgaacggtg 300
cgatcctcgg tcccgtgtgt aatcactatt ctccctcata gcctcgttct ccttaacgct 360
tcctcatcta cgtg 374

<210> 1621
<211> 366
<212> DNA
<213> Homo sapiens

<400> 1621
ctttgtttca aaaagcttat cccatctcta agaataacag tggtaacaac acaaaatatt 60
gttttaaaag gaagaaacaa atctaaacaa gaagttcctt actgcctata aaatctgaaa 120
ctttcttttt ttttttttta gaaaaggggt ttcctttttg cccccagggg gggaagaatt 180
ggggtaattt caaataattg taaatcactc ctccgggtac cccccatttt tccggcacat 240
ttccccgttt tattttagga caaaagcacg ccccccccctc caccaaatat ttttggcggg 300
gctcatacac cacacggctc atgtaacaac ctccgcatta tttataacat ttatcttgtg 360
ttagca 366

<210> 1622
<211> 349
<212> DNA
<213> Homo sapiens

<400> 1622
accagtgagc catgctgctc ctttaaataa aatgaggggt ttggaagaga aaatgaagag 60
aaatccttgg gaaatttgag agaaatgagt aaagaaaaag aaaatatatc cttttaccag 120
agttttcctt cttaaccctg acttggagtt gctctttgct ctggaggaga gctctagatg 180
ggctgggaga tttggatctc acttgcagta tttctcaaaa gcagctgtgc aaacccaggc 240
aagtcattct gcctctttgg gtgacaattt cctcccttga aaagtgaaaa tgatgtctcc 300
ctgtctgtcc tatcagtggg taaggaaaat cagatgaaat gatggctac 349

<210> 1623
<211> 345
<212> DNA
<213> Homo sapiens

<400> 1623
gttcatatac aggaatcaaa tcacattgac acacatagtc actttgtcct atttaaattc 60

tcttttaatt ctttagatta catagagaag aaagactcag tttgctgcta gtatttcctt 120
aaaacatctc aactctctct ctctccctct tgaacagagc aaaggccagc tctgattcag 180
aattctcagc tagcaacagt atctagctac aatttaacaa catcgtctgg gaatggtata 240
tatttttata tttatcttct attttggcaa atgatactgg atttccattt atagtaatga 300
tataaagttt ccttaataaa tgcatttatc taagtcaata attgg 345

<210> 1624
<211> 377
<212> DNA
<213> Homo sapiens

<400> 1624
ttgtaaaacc tggaaggaca aggtttgggc atggcatcag agctgaatga aagcttgcca 60
tcatggtgta ctggaaaggg acagatacat ggtgaatgcc actgttctgg actttgtgtt 120
cattggtaat aaatgaagga gctcaacttg tttttgcaag agggacattt gcaataatta 180
atctagggac agagagatac tgtaaagatc aatgattatg atttgggatc cggcctcaga 240
ttaaccaggg ctcaaaactc tcttctttct cttaataaaa gagagaatgt actgactttt 300
cgaatgtact cgccttaact tcccagtatg ttcttaatgt ttaaggcata ctgctctctc 360
ctcctaatct tgtaccc 377

<210> 1625
<211> 332
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(332)
<223> n = A,T,C or G

<400> 1625
gactaaagaa aatcccaaaa gccaataaat aaatatttac atatatggta tataaacctt 60
catttgtcct tgtgtcctgg ttcccaaaaa tataaagggt aagtctgctc ctctaattca 120
ctccaatctc agtccgaaca ctgaacttgt gtctaccaca ggcccaatcc tgctgtttgg 180
gtggagtgcc tgacagtggg gggagagagg gaagtaaagt ttttggtacc tcaagcaaat 240
gccaccttgt aatgaggctt tctccctttg gtcaccggcc tgtaccctat attatttgga 300
gtctagaagg tccaagttct gaacaagatt an 332

<210> 1626
<211> 416
<212> DNA
<213> Homo sapiens

<400> 1626
cgttgctgtc gaaaatacga cagaaaatag aagaaacacg tgcacagaga gtccagttaa 60
agaaattgcc aaaagttaac aaagagctgg cacttaaatt aattgaggaa gaagaggaga 120
agcagaaatc tacatggaaa aagaaagtta agagtcttcc taatattctc accgatgatc 180
gatttaaagt tatgtttgag aaccctgact tccaagtaga tgaagagagt gaagaattta 240
ggcttctgaa tccacttgtt tcaaaaatta gtgaaaaaag gaagaagaaa ctaagactct 300
tagagcaaca agaacttcgt gaaaaagaag aggaggaaga gccggaagga aaaccaagtg 360
atgcagaaag ttcggagagt tcagatgatg aaaaagcctg ggttgaagag gtcaag 416

<210> 1627
<211> 398
<212> DNA
<213> Homo sapiens

<400> 1627
aagacggcct acggttgcga gttgacgaca gaagggagcc tattttatga gataagtact 60
attttgttaa aattttatat ttaatataga taataaattg actaccccaa atggtggaat 120
gcaaggatag catattacaa ggaaaatgtt acaaacaact aacattaact agacaaagga 180
tgaaataatc atttcaaaaa aggttgagga ggctatcagt aaaattcagt atctattact 240
gataaaaatg ttggaggaaa aagtgtatca gaaaatataa tcatgggcca gtcgcggtgg 300
ctcacgcctg taatcctaac actttgggag gccgaggtat gtgggtcacc tgatgtcaag 360
agattgaaac cagccttggc cacgtaatga aaaccctg 398

<210> 1628
<211> 409
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(409)
<223> n = A,T,C or G

<400> 1628
cccgttaact ccattatatg ccaatagacc gagactccgt ctcanaaaaa aaaaaaaaaa 60
aagaaaaaaa ttcctttgaa aaaaaacccc cccctcaaag gaaacctttt ttttgggggg 120
ggggtttttc aaaaaaaaaa attttgaacc ctgtttttta cccattgggg aaaaggggng 180
aacccggctg gggcctcccc caaccgggcg gggggggga aaaaaccccg ggggccccca 240
aaaggccccc cctaatgccc gctaggggct tccttttttg ccccccattt ttgggggagg 300
ggggattttt aataaacccc ttggggcttc agccaaaaag ggtaaaaagg gaacccgttt 360
tcctggggca aattcctgaa aaaaggtggt gaaaaagccc actttgggc 409

<210> 1629
<211> 381
<212> DNA
<213> Homo sapiens

<400> 1629
cgttgctgtc ggcacgcctg ccccccttggg tgacctcttg taccccccagg tggaaggcag 60
acagcaggca gcgccaagtg cgtgccgtgt gagtgtgaca gggccagtgg ggcctgtgga 120
atgagtgtgc atggaggccc tcctgtgctg ggggaatgag cccagagaac agcgaagtag 180
cttgctccct gtgtccacct gtgggtgtag ccaggtatgg ctctgcaccc ctctgccctc 240
attactgggc cttagtgggc cagggctgcc ctgagaagct gctccaggcc tgcagcagga 300
gtggtgcaga cagaagtctc ctcaattttt gtctcagaag tgaaaatctt ggagaccctg 360
caaacagaac agggtcatgt t 381

<210> 1630
<211> 334
<212> DNA
<213> Homo sapiens

<400> 1630
tgctcaaacc agctaacttt tctaagatcc tgtttcccca tccataaact gaaataatca 60
gagccctacc tctttcagaa taagtaagga gtgaatgaaa tattccatat gacatgctca 120
acataatgcc tgccacacag aagtattcaa ttagtactta attcttgtta tatttttatc 180
attatttgga tttaactatc ttgctgagtt gtttggaagc caaatgaggt cattgcctcc 240
aaacatttat tagagatatt gctatgtgct aagcattaca ataggtgcag gagaatacaa 300
acgtgaatgc ctgcaaggaa cttacaccag aagg 334

<210> 1631
<211> 418

<212> DNA
<213> Homo sapiens

<400> 1631
cgttggtggc gcaggcagat gtctccaaaa atgattgtga tcaagaatct gaattataag 60
attgggagtc gggtccccaa cccagtgctg ccaactgtac agctgcgcct ccacgaaggg 120
gcatatgcca ggctcgtctg accctggaat gaggatgtag gaagcaggca gagctccggt 180
tcagccctca caatgggact gaagcaggag agaaggctgg gcagaagggc tgtggggaag 240
tagggcttgt ctccatggat gacgtccaga aggatgtcag gaggaggaat atcacaggag 300
ttatagacat tggagggaac agagactggc acaggacctc ttcattgcag gaagatggta 360
gtgtaggcag gtaacattga gctcctttca aaaaaggaga gctcttcttc aagataag 418

<210> 1632
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 1632
cagaactgga gcgtggcgat ggcgttaagg ttttgaggga gcgagccacc tagcggaggc 60
tgtccttcac cgcgggcgcc aatggggagc agaaggactc ggacacagga ccgccggggt 120
cctgcttgtc ctggggcagc cacgagggag ccctcgtcag gagcgccatg ggccgaagct 180
gcctgccctc tgcacgtgga tgtttctttg gaacaagggg aaaaattatg actttcttat 240
tttgctttga cctgtgaatg acaccctggt ctctggtgcc tggggtgtgc tctctgcagt 300
gctgtcaggc acatgctggt tccttcagcg ctaggtgctt ggcaccttca gtcttttgct 360
gacgccatgg tcgttcctgg ggccn 385

<210> 1633
<211> 407
<212> DNA
<213> Homo sapiens

<400> 1633
ggcacgagcc aaaatggatc tatgctgaag ccagctgtct gtactcgtga actatgcgtt 60
ttctccttct acacactggg cgtcatgtct ggagctgcag aggaggtggc cactggagca 120
gaggtggtgg atctgctggt ggccatgtgt agggcagctt tagagtcccc tagaaagagc 180
atcatctttg agccttatcc ctctgtgggg gaccccactg atcccaagac tctggccttt 240
aaccctaaga agaagaatta tgagcggcct cagaaagctc tggatagtgt gatgtctatt 300
cgggagatga cccagggctc atatttggaa atcaagaaac agatggacaa gttggatccc 360
ctggcccatc ctctcctgca gtggatcatc tctagcaaca ggtcaca 407

<210> 1634
<211> 374
<212> DNA
<213> Homo sapiens

<400> 1634
cagtctctac taaaagacag aaacaataca ctgccaaaat gttaagttga ccaccgtgaa 60
acttctctat tggagtgtct gtttctttaa gctgtgaata ctgaaattat gccttgtctc 120
ctccccaccc caggggatg ccgttttgca gtgtggacac gtgtttgaag cagttactaa 180
actcgtcatc ctggttaaga aggagaacat tgtcaatgtt gttcaaggaa ggtaggtggc 240
ttcatcttca gctcaggaag taattcaatg ttaaaatgct tattaaggcc gagcgtggtg 300
gctcatgcct ataatcccag cactttggga ggctgaggtg agcagataac ttgaggctag 360

gagttcaaga ccag 374

<210> 1635
<211> 333
<212> DNA
<213> Homo sapiens

<400> 1635
cagtctctac taaaagacag aaacaataca ctgccaaaat gttaagttga ccaccgtgaa 60
acttctctat tggagtgtct gtttctttaa gctgtgaata ctgaaattat gccttgtctc 120
ctccccaccc caggggggatg ccgttttgca gtgtggacac gtgtttgaag cagttactaa 180
actcgtcatc ctggttaaga aggagaacat tgtcaatgtt gttcaaggaa ggtaggtggc 240
ttcatcttca gctcaggaag taattcaatg ttaaaatgtt tattaaggcc gagcgtggtg 300
gctcatgcct ataatcccag cactttggga ggg 333

<210> 1636
<211> 393
<212> DNA
<213> Homo sapiens

<400> 1636
ggcacgagga gaaggaaaac actggattca taagccacgt ctgggaagtt ggaaaaggag 60
aaagaagcaa aggaaggctc tgaaccaaag gagcaggaag accttcaaga gaatgatgag 120
gaaggctcac aagatgaagc ctcggagact gactactcat cagctgatga gaacatcctc 180
accaaagcag atacactcaa agtaaaggat cggaagaaga agaagaagaa aggacaggaa 240
gcaggagtat tttttgaaga tgcatctcag tacgatgaaa acctctcgtt ccaggacatg 300
aacctttccc gccctcttct gaaggccatt acagccatgg gcttcaagca gcccaccccg 360
atccagaagg cgtgcatacc tgtgggtcca ttg 393

<210> 1637
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1637
cgttgctgtc gcaaggcgcg ttcgagcagc ggcgaccgac gcggcgaagg agcgcgccat 60
ggagcatgtg acagagggct cctgggagtc gctgcctgtg ccgctgcacc cgcaggtgct 120
gggcgcgctg cgggagctgg gcttcccgta catgacgccg gtgcagtccg caaccatccc 180
tctgttcatg cgaaacaaag atgtcgctgc agaagcggtc acaggtagtg gcaaaacact 240
cgcttttgtc atccccatcc tggaaattct tctgagaaga gaagagaagt taaaaaagag 300
tcaggttgga gccataatca tcacccccac tcgagagctg gccattcaaa tagacgaggt 360
cctgtcgcat ttcacgaagc acttccccga gttcagccag aa 402

<210> 1638
<211> 382
<212> DNA
<213> Homo sapiens

<400> 1638
cgttgctgtc ggagcgcgcc atggagcatg tgacagaggg ctcctgggag tcgctgcctg 60
tgccgctgca cccgcaggtg ctgggcgcgc tgcgggagct gggcttcccg tacatgacgc 120
cggtgcagtc cgcaaccatc cctctgttca tgcgaaacaa agatgtcgct gcagaagcgg 180
tcacaggtag tggcaaaaca ctcgcttttg tcatccccat cctggaaatt cttctgagaa 240
gagaagagaa gttaaaaaag agtcaggttg gagccataat catcaccccc actcgagagc 300
tggccattca aatagaagag gtcctgtcgc atttcacgaa gcacttcccc gagttcagcc 360
agattctttg gatcggaggc ag 382

<210> 1639
<211> 176
<212> DNA
<213> Homo sapiens

<400> 1639
ggcctacgtg ttcttgcggt ggcggagcgg cggattagcc ttcgcggggc aaaatggagc 60
tcgaggccat gagcagatat accagcccag tgaacccagc tgtcttcccc catctgaccg 120
tggtgctttt ggccattggc atgttcttca ccgcctgggt cttcgtttac gaggtc 176

<210> 1640
<211> 405
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(405)
<223> n = A,T,C or G

<400> 1640
cgttgctgtc ggaaagatgg cgtgtgtggt cctcctccat caaagaaaat gaagttattt 60
ggatttaaag aagatccatt tgtatttatt cctgaagatg acccattatt tccacctatt 120
gagaaatttt atgctttgga tccttcattc ccaaggatga atttgttaac tcggactaca 180
gaagggaaga aaaggcagct ctacatggtt tctaaggagt tgcggaatgt gctgctgaat 240
aacagtgaga agatgaaggt tattaacacg gggatcaaag tctggtgtag aaataacagc 300
ggtgaagagt ttgactgtgc tttccggctg gcacaggagg gaatatatac attgtatcca 360
tttattaact caagaattat tactgtatca atggaagatg ttaan 405

<210> 1641
<211> 406
<212> DNA
<213> Homo sapiens

<400> 1641
ctacaaaagg ttctttgctt ggttgagatg tctgaaaagc cttatattct tgaagcagct 60
ttaattgctc tgggtaacaa tgctgcttat gcatttaaca gagatattat tcgtgatctg 120
ggtggtctcc caattgtcgc aaagattctc aatactcggg atcccatagt taaggaaaag 180
gctttaattg tcctgaataa cttgagtgtg aatgctgaaa atcagcgcag gcttaaagta 240
tacatgaatc aagtgtgtga tgacacaatc acttctcgct tgaactcatc tgtgcagctt 300
gctggactga gattgcttac aaatatgact gttactaatg agtatcagca catgcttgct 360
aattccattt ctgacttttt tcgtttattt tcagcgggaa atgaag 406

<210> 1642
<211> 320
<212> DNA
<213> Homo sapiens

<400> 1642
gttcactatg taagttaaaa tatcaaagag ggatatacaa ctgaaaagta aaagttcacc 60
tttctttcct ttctcctact tctataattt gatcagttta gataaaatat ctctgctttt 120
caaaattact ctctagctgg ctcttgagga aaaaaaatgg gggtaggagg agctggggcc 180
ttcccttatt tatacaagcc gatgaagagg tcctagactt ttggagagtc acagtaaaga 240
aagaaaacca gtcacctgat ttaaacaaac aatatattca ggtttctgaa tctagatttc 300
tagttccagt ctttgaacag 320

<210> 1643

<211> 316
<212> DNA
<213> Homo sapiens

<400> 1643
tatcttcaa aactgaatgc aaaactagaga tgtattcaga caaaaaccaa gaaaactttg 60
cactagcaga ccaaacatgc acactatgag aaactaaagg aaattcttca agtagaatga 120
aaataatgcc aggtaaaaca tgaaatataca aaaggaaatg aacagtgaca aggataaatg 180
aatactgagt ttacaaacag tgaatgtaat gtcctgtggg gtctgaatta tacatagaat 240
acaaatgcac aataacaatg ctaaaggcag aaagaggtaa attcatttaa aggttacaca 300
gttctagcag tactga 316

<210> 1644
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1644
tatctgctgt aatattttta tctaaggtag ggataaaaac atcccatttc tggactttac 60
ttggagaacc agctagaggt gaacatacga cccttcatga cctggactga aaacattttc 120
aagttctcta tttcggtcaa tacgtcccct ttaataattc cccaaagcat ctccccttc 180
cacctgtgct acgactctct ngcgacgtt ttgtattccc acagatcaca aaatcacaaa 240
gcaccggagc tggaagaatc tta agata atccaaggcc aggagcggtg gctcacgcct 300
gtaatcccac cactttg 317

<210> 1645
<211> 323
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(323)
<223> n = A,T,C or G

<400> 1645
atctggttag tacaatgcac tt atatatgc tgtgtgtgtg cgtgcgcgtg tgggtgagta 60
tgaggcccat ctttctctct gg cccattc ttttcacaga attaacgtat gtacccatca 120
gatttggttt aagatctata tt tggtgac cacacaaatc acatcttgtc tactgatctg 180
actcctatgt tattctgtct ga gttgcta ttgggctctg tgacctttgg gaacttgctt 240
gatttctctg ccatttttat cc tatctca gatgcgtatt ttgaaatttt aatgtcattg 300
ttaatgtgaa gaactcagcc ag 323

<210> 1646
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1646
tacggttgcg cgacgactac ag aggacac gaaattaaag catatagagg tcaagttttt 60
ctccaatgtt actgcgataa ca atggcaa agacaaaatt gtcaaccagg gtatttgagt 120
tcagagaaaa cactcttagt gg atatgtta gagtgtgaga gtcataaaca gcacattgct 180
tttacactga acttctacac at atttgagc aactgggtga tttaaaaaaa ttattacacg 240
gatgatgaat tattaagcaa at ctgaact ttttaaattg gagatatttt aatacttata 300
taagaaattg caggttttca cc atcatag ctttacatat cccacagagg g 351

<210> 1647

<211> 267
<212> DNA
<213> Homo sapiens

<400> 1647
ctactgtcat tatgtctggc [illegible]ggaga aactctgtga gtagctatta attaacaaag 60
acaaagcaca ttaaagagaa [illegible]aagga gggagggagg aaggaaagta aagtttgaga 120
ggaaaagaat atagattcct [illegible]ctggg gataagtaat gaagccttat gcttgctata 180
ttttttcttt ctggaaatat [illegible]gtgtc tgtggtgaca gacgaaagac cattttactt 240
gaacaaagag tttaaataca g [illegible]ga 267

<210> 1648
<211> 247
<212> DNA
<213> Homo sapiens

<400> 1648
tgggatatgt gtcgcttaaa gga[illegible]ttctt gctgctttgc agacagtggc ttgaatgggt 60
caatggtttc tcacgtgaaa tca[illegible]cgaaa gaatttcttg gaaagaatgg aatttaacac 120
atatgtgtgg gaggatttca aat[illegible]tggaa agaaataggg ttcaaaagag actgagctat 180
atgctgcaaa tcctgacact ggg[illegible]tatac ccgtacagtt tgaagagggt taattcaata 240
gaaaaat 247

<210> 1649
<211> 370
<212> DNA
<213> Homo sapiens

<400> 1649
tgtggactac gactgcgaca tga[illegible]acaga cggggatgag tgtgatccat cctatcctca 60
gatggaagga taaaaaacct ata[illegible]catta caattgatga gcaataacta ttatgagaaa 120
acacaacatg ccttcatggt acc[illegible]gcccta gcaacaatac gcattcattt gatcgaacta 180
cgtccatagt gaggggcatg tat[illegible]atagac ccatagctaa ttcgtactca atggggaaaa 240
tcgaaagcct ttcctctaga ata[illegible]ggaaca tgagaaagat gcccacttta atccctttta 300
ttcaacatag tattggaagt cct[illegible]gctaca acaatcaaac aagagaaagt aagaaggagc 360
atccaagttg 370

<210> 1650
<211> 356
<212> DNA
<213> Homo sapiens

<400> 1650
aggatgttag ccaggaggat ctc[illegible]aggacc tgacctcatg attcacctgc ctcggcctcc 60
cgaagtgctg ggattatggg ggt[illegible]gccac cacgcccagc ccatttgtcc ttttttaat 120
caaaagattt taaaagtaca agt[illegible]ctgcca cagagtgcag gtctgcaaag tgtttcgact 180
ctacaaaaga gtgtttgtat ttt[illegible]aaagtt caggaaccat tttacggact aagacactga 240
ggccctagga gatagggctt ctt[illegible]gccaag ttgcagagcc agctggggcc cagggagttt 300
aatccaagtg gtgtgggtct ccc[illegible]tctct ctgttcaggg aagagccccc ttcatc 356

<210> 1651
<211> 336
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(336)
<223> n = A,T,C or G

<400> 1651
caggctcacc gattcacttc atccccgtca ccaggtactt gttagttagg tacacaaaat 60
tattcttgtg gattcctgaa agtcttgtca cagtttgtta tctgcagact ctcacttata 120
ttcatctcaa agaaacgaac atgatcacct ggtctagttc ttccgacaag cctggacaat 180
atagtaagat cccatatcta taaaatgttt tcaaaaaaat tagctgggtg tgggggtgtg 240
cacctgtggn gcctgctatt caggaggctg aagtaggagg atcccttgag tccaacagtt 300
agaggctgta gtgaacagtg atggtgccac tgcact 336

<210> 1652
<211> 342
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(342)
<223> n = A,T,C or G

<400> 1652
tattgttagt tattgttgtt aatctcttac tgtgcctaat ttataaatta aacttaatca 60
ttggtatgta tgactaggac aagacatagt acggtatata taggatttat tattattttt 120
ggttttaggt atccatttta ggttttaggt atccactggg gatcttggaa tgttttccct 180
gcagataagg gggggactac tgtacattac tttctccatg taaatattgc ccatgtaaat 240
actgctgaga ccagtagtat attatgattc tatttacttt cttatatgct ttgntttcct 300
tctcaagtta attgcctgat tntatgttta tttcttttta tt 342

<210> 1653
<211> 412
<212> DNA
<213> Homo sapiens

<400> 1653
cgttgctgtc ggggctgttg tgagagctag aggcttggta gtaaaacaat gctagatgtg 60
gtgtctgctc ctgagcttaa aaatagcttg agaaagacag tgatattatc agaaaagaat 120
gtgcataatg aaaagttgaa acttttaaaa actcactcaa aactaagttt taaaaaagag 180
ccaccgcgcc cagcctgaga cgtgttttaa agactgactt ttgtttcttt tctagatata 240
aatttagaaa ttgagaagtg tattttgaaa aggcataata agaaaaacta tggtatataa 300
ttatttttaac ttgccatatg aaaacctaag gcacagggag gtaacttgcc tacaggtgca 360
gccctaggaa gtcagggagc caggattcac tgtcagctga ctgactccaa at 412

<210> 1654
<211> 336
<212> DNA
<213> Homo sapiens

<400> 1654
cggggacggg ctcgttcctg ccacactaac aattcgagaa gccaaggccg gaattattct 60
tgagaccgag ggaataggac caatcctcgc catcataggc tgacttcatc gctccaacag 120
gatgatttgc atattatcca tgtgcaatgg cacacacctg gagtgcgacg tacttgggag 180
gctgaggtgt gaggatcact tgagcccatg aggcacaggt tacagtgagc caagatctca 240
ccactgcact ccagcctggg tgatagagca aggtcctggc tctaaaggaa attttaaaga 300
ttgcccttgg aattaagatt aatatgtatt ccctgg 336

<210> 1655

<211> 334
<212> DNA
<213> Homo sapiens

<400> 1655
agctgtgacc tgagggatga attgcccatt gattcattta ttgattgaaa cgccctttat 60
tgaaagtctg ctatgtgcca agcattgctt taggcacagg gtgtatatag tgttaaataa 120
ggtccctgct ctctcagagc ttacaatctg ataaaagaga aatgcaatga gcaaataagt 180
aaagaaaagg aaatatcaag caggcaataa cttctgctat gaaaatcaaa ctggggaatg 240
tgataagaaa tgcatagggg gctatgctag gtggggtggt caggaaaggc ctttctgaat 300
aggtgaaatt tggaggttaa aaaacatgga tagg 334

<210> 1656
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1656
aacatcacta tcaattaaca ttttaattga tagtgatgtt attaggcttt tcatttaagt 60
catctacaaa ttgattgaca attgaacttt atcatttgct tagttcactg ctaaatcaaa 120
ctgtttaata ctttttttcta atagtaaaaa catactgaag attgagaagc actggtgtag 180
aaaaaatatg taaatatata aaatgtaata gcctggaaat caatcagaaa attggaactg 240
attccatttg taagaacaga aacataaaat aagttttaaa cttataaaac ttttatttta 300
aaattactac aaacctcaat gtagggtata aaaga 335

<210> 1657
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1657
tcgaattccg ttgctgtcgt ggacaaacat tccttttctt ttcaagatcc taaagctgat 60
catcaacgag ctctccaacg tcatggaggc taatgccgct cgccaggcca ctcctgcaga 120
gtggagtcaa gatgactcca atgatatgtg ggaggaccag gaggaggaag aggaggagga 180
ggaggatggt ttatctggcc aacttttatc tgacattctt gctacaagta aatatgagga 240
ggattactac gaggatgatg aggaagatga ccctgatgcc ctgaaggatc ctctctatca 300
gattgatctg caggcatatc tcacagattt cctctgccag tttgctcaac agccctgcta 360
cataatgttt tcaggccacc ttaatgacaa tgagaggcga gt 402

<210> 1658
<211> 399
<212> DNA
<213> Homo sapiens

<400> 1658
cgttgctgtc gcgagtagct gggattactt tcgcccacca ccatacctgg ctaatttttt 60
gtatttttag taaagacagg gtttcatgga gaaaccaata tagaattgtt caggctggtc 120
tcgaactccc aacctcgggt gattcaccca ccttggcctc ccaaagtgct gggattaaag 180
gtgtgagcca tcgtgcctgg cctaaaaaat ttttttttct tcatctgggt ttttgctttg 240
aaaacaagtt tctccaaatt tacagatttc ctgatgatgt tgggtctgaa ctcaccaact 300
tgattaggtc tttaggggcc gagggactac ccagctgcac aggtgactgg atgggggagg 360
tgtgggaggg ttttctccac actacgtcct tctgcattg 399

<210> 1659
<211> 347
<212> DNA
<213> Homo sapiens

<400> 1659
aaaccctgtg aggctgagct gtgagggaag gtttggagtt tgctatggga aaggctgcag 60
ggtctataag aattgaaaag gggaggccaa ggaggcttca gatcccctg acagtatttt 120
taaaagatgc aggttaaaaa attgattttc ttgttattta tattttgata cctaattgaa 180
cttctccaac ttgacctctt ttaaaaacaa caacaagaaa aaaaaaaaaa aaacccctgc 240
ttcccctat tccttaaccc gggagggccc tttcccaaaa aaaaaaactc cagcccgatt 300
tctttgggaa aaaaaaatcc taaaaccctt aaaaaaatac ctttaag 347

<210> 1660
<211> 362
<212> DNA
<213> Homo sapiens

<400> 1660
aacaaaaaat atgaagacat actatgtgct gggaattatt ttaaaactaa gaaaacaata 60
aaggaaaaaa actagattgc tcctttccct cattattata ccacacgttt tctgtcagta 120
ctacaggaat atataaaagg tctatcttcc ttgagggcaa gattcaggtc taattaatct 180
tttgatcttt cttattactc agccagagct ttgcacatgg cagacataag gtaatagttg 240
gttgagtcat ctatgtaaat gaatgctgct tagtgcctac aaaaatggga tttctcaaag 300
atgattagag aggtaagtgg taaggaagat gttttctcat aaaacccagc agctttggga 360
ag 362

<210> 1661
<211> 176
<212> DNA
<213> Homo sapiens

<400> 1661
agcttgcatg agccaccggg cctggtcaag aataaggtca tttattgttg tataggcaat 60
aagtgtgaat caaggatact tttaaaaact cataggtgag cccgggcatg gtggctgaaa 120
tcagcctgca caacccgtag tgagacacca tctctacaaa ttaaaattaa aacttt 176

<210> 1662
<211> 358
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(358)
<223> n = A,T,C or G

<400> 1662
gaagatgtga gtgtgactcg taaaggcaag agcatgtata ttatgcaaaa gcagcctgaa 60
atattttatt cacagacaga cagacaatgc ttgactccct gctaatctga aatacttcgt 120
ggggagggcc agggaaatca aaacaaaatc tcagaagtag aatgagctat ttggtgtatg 180
tctccaaggc cagtaaataa caagaaggaa aaataaattt ctttgctaac aacaagaagg 240
agaaataaac ttttttgctc taaaatattt tccaattatc tccacgacac tggagggaag 300
gactancnnn nnnnnnnnnn ggagggaggg agggaaaaan nnnggaaagg aaaaagga 358

<210> 1663
<211> 400
<212> DNA
<213> Homo sapiens

<400> 1663

cgttgctgtc gggaacaaca aaacattttt catagagatg ttataaagat tagagattat 60
ttggcactgt gtgtgacaga ttataaaggt tcgatgaatg aaatctggca aatttttaga 120
tatatgtatt caacgaattt tttggtggaa cacagataac ataatcctga gaattaactc 180
tttgtacaga cctcaagatg agcaaagctc tatcactttc agaaccatga ccactctggt 240
gattttgatt tcagaatctt ctttcattct ggtaaacccc ctttgcccca ccaaatattg 300
tatggaaata catttttttt ttttttttt gaaacaaagc ccccctcact ttgttcccca 360
aaaggaaggg caggggcgaa attttggttc accgcccccc 400

<210> 1664
<211> 365
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(365)
<223> n = A,T,C or G

<400> 1664
tacgtctgcg aatacgacag aaggggtgg agattgcagt gagccgagat tgtgccactt 60
cactccagcc taggtgacac agcaagactc catctcaaaa aaaaaaaaaa aaatttttg 120
ttttttttt tccccttttc ccccccccaaa atataaaggc tttttaaccc ctgttatact 180
gctttattat ttttaatagc attattgaaa tgaggttttt ttttgtctcc caaactggat 240
tttttttac cacaattttt gttccttgaa ccctaatttt ctgggcctaa ggatatcttt 300
tttctttaac ctccacaatt taaaggggt tcacccaccc ttggtaaatt ttgattttat 360
ttgan 365

<210> 1665
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1665
tactgaagac cagcgcgttc cttacagctt ttcacagact ctcaccacaa acccagtgac 60
caggccaaac atctctctta ccgattacag ggtgggtgta ctctgctggg ataataatta 120
tgttatcctt ctgaacctgg ctaacaacaa gtgttaacaa tcatagggaa atgggtttag 180
gaaagctaac tgggttgagg ttagagaggc cataaggttg tatgaggcag cacaggatgt 240
ggccacaggt cctgagtcac agagcaagac ccggcctcta aaaacaaatt tttttatttt 300
ggagggtgga ggataggggg tgggaggg 328

<210> 1666
<211> 320
<212> DNA
<213> Homo sapiens

<400> 1666
tcagatggag atggtggttg cacaacattg tggatgtact aaatgccact aaactgttcg 60
ctttcaaatg gttgatttta tgttatgtaa atttcacctc acattatttt taaaaatgat 120
ggcttttaaa gaatatttac tgacatagga aaattcacac cacataccta ttattaaaac 180
tggacttaca atataatctc aattttgaaa gattaaaaat gtacatgtga gtttgtgcat 240
atatacatac atacagatat gcgcgcgcgc acacacacac acaccatata tatatatata 300
tactcatcct cctccccaaa 320

<210> 1667
<211> 343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(343)
<223> n = A,T,C or G

<400> 1667
taaacaatta tgttcctata ctttacccat ttaaaaattg gtttgttggt ctttttctta 60
ctgacttcag gagctgcttt tatttctgtc ccaatttttg caccttctaa ctggctggaa 120
tagtttttac tgatatgact atgtactggg aaaaccctaa aagaaactaa tgattaaacc 180
aactcaaaca ataaagagtt cagtaattgg tagatgcaaa ttggtagata cagtagcctt 240
catgtccaca aataatagac agttaaaagt tatgatggta gagaaagccc catttcaata 300
gcaaaagaga agataaaaat atttagaaat aagttcaaga aan 343

<210> 1668
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1668
taaacaatta tgttcctata ctttacccat ttaaaaattg gtttgttggt ctttttctta 60
ctgacttcag gagctgcttt tatttctgtc ccaatttttg caccttctaa ctggctggaa 120
tagtttttac tgatatgact atgtactggg aaaaccctaa aagaaactaa tgattaaacc 180
aactcaaaca ataaagagtt cagtaattgg tagatgcaaa ttggtagata cagtagcctt 240
catgtccaca aataatagac agttaaaagt tatgatggta gagaaagccc catttcaata 300
gcaaaagaga agataaaaat atttagaaat aagttca 337

<210> 1669
<211> 331
<212> DNA
<213> Homo sapiens

<400> 1669
gtttcattct gcatgtcttt ggtcatacaa tagtctattc tattattcta taggcatttt 60
tctaacccac tccaaatcca ttttgcagtg aggtacggat ataaatacaa aggtaaacaa 120
tgtaattgta ttacttgtgt atgcatgtat gttcttgcat gtgtgtattg agaggaatgt 180
ttgtctgact acctccatgt gccagtctga tcttctggag agaaaattgc tgggaggctg 240
tgacatgaac cagtgtggag gcaaattaat gacaagactg agaactggca tgaagagaaa 300
tccatgagat ggacaagcca ccctttaag t 331

<210> 1670
<211> 328
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 1670
ggagcgtttg aacacaccac ggaaatgatg ccctgcccta agcccttggt ttgggaagga 60
tgagatccta ttgtttttg tgtcccctct attatctttt gaacatgggt taactacatc 120
tacggcattt ataacatgtg gcaagcataa gctcttgagt ctgatgtttc tgatgccatc 180
tactcttact gcctttggca cctcccagct actgacttcc tcctgcttcc ccctggatcc 240
agatacgtgg ctgggaagag cccctggcct ttgtagccag aggaggtggt gaccatgggc 300
aacaggccac tgtgctcctg gatgcgtn 328

<210> 1671
<211> 384
<212> DNA
<213> Homo sapiens

<400> 1671
cgttgctgtc gaaaaatgta aaggagctca gccttttttt catacaatat ttgttcatat 60
cattaactcc ctcatattta tgtacataaa ttattggtgt taatgatatg aacaaatatt 120
gtatgaaaaa aagcgaaaat gcaaagtgct aattcttggg cagggtggga gaaggcaaat 180
cacccaataa aggataaccc tttaacattt tatctaagaa aaaagaagga agagaaaaat 240
atttaccatc tcagattaga agacaatata aatatataca tctatgttaa tacttttgaa 300
aataccagca aaatagaaac atatgttttc ctccagaaaa atagaaaacc ttggaaatta 360
gtaaccatgt ttccatggtt atta 384

<210> 1672
<211> 348
<212> DNA
<213> Homo sapiens

<400> 1672
tggtacgtac ctgtagtccc agctactcag gaggctgagg tgggagaatt gcttgagcct 60
aagaggtcga ggctgcagtg aggtgtggtc gcagcctggg taacagagtg agatcctgtt 120
tgaaaaaaaa agagcaaagg gcaaaaaact aagagttgca tatgaaagaa ataccaatga 180
ataccacgga aaagatgttc aattccattc ataagatgag atatacacat ttggtttata 240
aaaagatagt ggtcttcacc taaaaaaaaa tagcaaaagt taaaagtctc agtatatact 300
atatttgttg aagctgcttc agggaaagaa tccagccttg atggtaga 348

<210> 1673
<211> 129
<212> DNA
<213> Homo sapiens

<400> 1673
tacggctgcc atatgacgac agaaaggagg aggaagctgt ttgtattcct tgggctcggg 60
tggctcatag tggccggttt ttccgcgctc ttttctctgt gtaccagatc gggataggtc 120
tctcttggg 129

<210> 1674
<211> 427
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(427)
<223> n = A,T,C or G

<400> 1674
acacagctct tgtctttttg cggannnntt gttctaattc ggcacgagcc caccttтgcc 60
aaggtccagc ggggcgtcca ggacatgatg cgtaggcgtt ttgaggagcg caatgttggc 120
cagatcaaaa ccgtgtaccc ggcctcctac cgcttccgcc aggagcgcag tgtccccacc 180
ttcaaggatg gcgccaggag gtcagattac cagctcacca tcgagccact gctggagcag 240
gaggctgacg gagcagcccc ccagctcacg ggctcgcgcc tcctgcagcg acggcagatc 300
ttcagccaga agctggtgga gcacgtcaag gagcaccaca aggccttcct ggcctccctg 360
agccccgcca tggtggggcc ggaggaccag ctgacccgct ggcacccgcg cttcaacgtg 420
gatgaag 427

<210> 1675
<211> 255
<212> DNA
<213> Homo sapiens

<400> 1675
tgtcacctta ttcacacatc cagacacgtg atgtctgcta cacataccta ccattttaac 60
attcatgctt acacacacat tcacatgcat acagagagaa aggagctctc tctctttcat 120
gggtttctca ttgagaatca tgatgatatc agcacaggtc tttggaggaa aggaaattta 180
cattctatat ctggaacctc aagaatgttc cagccgtgtg tggtggctca caccactggg 240
tgtggtggga ggcca 255

<210> 1676
<211> 350
<212> DNA
<213> Homo sapiens

<400> 1676
gagtttgcag agacaggaag agagcagtct gggaggaggg aacagggtga gcaaaagcag 60
actatggaag gcagaggcat aagacagtgc aataagttgt acaagggaag atgaggttga 120
cacctgacca ctgaatgtca ggttgaaaag gcccaacatt cacccacacc cacccatttc 180
caaaacacac atgcacgcac acacatgtgc aaagaattcc agcctcatga aagagtggag 240
caggttcagt ctcaccatag atcaatttca tggagatgtg tccagccatg tgtacatctt 300
ctcccattga agaggctatg gaggtaagaa cctatatcca taagccatgg 350

<210> 1677
<211> 388
<212> DNA
<213> Homo sapiens

<400> 1677
cgttgctgtc gctgaggtgc acagagccca aaggcagaga gaggggctga aggatagaca 60
ggtgtgtagc atgggctagg tttacggtga gtgcttacta aatgctgtgg aatgattgca 120
tgagttccag aaggacccag actggtgaca cagagaatgc agaattggct acactgggaa 180
ggagactcca cctgacacag caggagaacg ataagcagat gtatagtgct tgggcagggc 240
caggcaaagg ggagatttgc tcagaaaatg ttgaatgaat gaatgcacaa atgcatggga 300
aggcaaaggt aagcatgaga gagccacaca gatgaaacaa acaaacaaaa aagacagaaa 360
tagggaatta aatagggcca ggcacggt 388

<210> 1678
<211> 368
<212> DNA
<213> Homo sapiens

<400> 1678
ggctgtacaa agagacagag gctgttagct atggctgaag acagtggcaa aaaaaaaaag 60
ggggaaaaat ttttaaagtt ttgtccaagg gttcccttaa aaggggttgg gaaacctcgg 120
gaataacccc cttgttaaaa accacggggg ttggacaaac ttttttccaa cccttagtcc 180
ttattccggt taaaaggcca cccggggtaa aaaaagccac ccccaaaaaa aaaccggtaa 240
aatggtggaa accccgggca aaaaaggttt ttcagggggt tttaattttt tggcaaaaac 300
acaatttttg ccctttgagg gagaggaaaa aaaaaaattt tttttggtcc ccattgtgga 360
aacggggc 368

<210> 1679
<211> 429
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(429)
<223> n = A,T,C or G

<400> 1679
gagagcatta acccannngt tttgnagagg aacccatcga ttcgaattcc gttgctgtcg 60
ccaatgtgcc cttcctggtg gccctggcgc tcctgagctc cgtcctgggg ggccttgtcc 120
tggtccccgg cctcctgcag gggccgctgg cgctgaggaa catcactgac accggcttca 180
agctgctgct gctgggtctg gtcaccctca acttcgtggg ggccttcatg ctggagagcg 240
tgctagacca gtgcctcccc gcctgcctgc gccgcctccg gcccaagcgg gcctccaaga 300
agcgcttcaa gcagctggaa cgagagctgg ccgagcagcc ctggccaccg ctgcccgccg 360
gccccctgag gtagtgcagg cccacgggca ccccagacac tggaactccc tgcctctgag 420
ccaccaact 429

<210> 1680
<211> 411
<212> DNA
<213> Homo sapiens

<400> 1680
ctcactcccg ggcagcttag agcaagggcg gagctgaact tcgaacaaga tgagctggtg 60
gacggaggcc agcggggcca catgcacaac ggccttaact accgtgaggt ccgcgagttc 120
cgctccgacc accatctggt acgtttttac ttcctcaccc gcgtgtactc cgattacctc 180
cagaccatct tgaaagagct gcagtcgggc gagcacgccc ccgacctggt catcatgaat 240
tcctgcctct gggacatctc caggtatggt ccgaactcct ggagaagcta cctggagaac 300
ctggagaacc tgttccagtg cctgggccag gtgctgcccg agtcttgcct cctggtgtgg 360
aacacggcca tgcctgtggg cgaggaagtc accgggggtt ttcttccgcc c 411

<210> 1681
<211> 405
<212> DNA
<213> Homo sapiens

<400> 1681
ggcacgagga ccgaccagga ggtcctctgt tgagctggtg cgggcgaagc tgccggctgt 60
gggggccctg atggagcgtc tcggtgtgct gtggacgctg ctggtgtccc gctggttcat 120
ctgcctgttt gtggacatct tgcccgtgga gacagtgctt cggatctggg actgtttgtt 180
taacgaaggc tcgaagatta tcttccgggt ggccctgacc ttaattaagc agcaccagga 240
gttgattttg gaagccacca gcgttccaga catttgcgat aagtttaagc agataaccaa 300
agggagtttc gtgatggagt gtcacacgtt tatgcagaaa atattttcag aacctggaag 360
cttatccatg gccaccggcg ccaagctccg caagagctgc agggg 405

<210> 1682
<211> 383
<212> DNA
<213> Homo sapiens

<400> 1682
cgttgctgtc ggtttgaacc cggtgaggcc catgtgggca ggccgtgggt aggcaggggg 60
caccgcgggg cctggcatat cccagcagcc tggctctgtc tcgagcaggg gacaagacgt 120
tcgaggagta cctggatgag tattaccggc tggactacga ggacatcatc gacgacctgc 180
cctgtcgctt caagtaccgc acagtggtgc cctgtgactt tggcctcagc actgaggaga 240
tcctcgctgc tgacgataag gagctgaacc ggtggtgctc cctaaagaag acctgcatgt 300
acaggtcaga gcaggaggag ctgcgggaca agcgggcgta cagccagaag gcccagaact 360

catggaaaaa gcggcaggtc ttc 383

<210> 1683
<211> 419
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(419)
<223> n = A,T,C or G

<400> 1683
cgttgctgtc ggcgtagatg tttccaccca ctattctaac agctctatct atgaatatat 60
tgtacggcgg ggggccctgg atttctcttt ctttgatttg atccgctact gtgtcagcgt 120
ttgcaatcag attgcatctc acctgcacat acatgtcttc agaatcaagg tctctacagc 180
tcattctaat catcattaat gatgtaattg gtatatagga acatcatgtt ttctgcagga 240
aagaaagtaa catattaagg agaatggggg tggataagaa caaatataat ttataataat 300
caatgctgga taacttttat tctttattat tggtaacacg ccctaactat cctgtgtgag 360
aatgggaatt tcaagtccca tcttgcaaat tggatatgtt gtcatgcacg gtttgagcn 419

<210> 1684
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1684
tgggattaga ggcgtgtgcc accatgcctg gctaattttt gcatttttag tagagacagg 60
atttcatcat gtttgctagg ctggtctcaa actcctgccc tcaggtgatc catctaccat 120
ggcctcccag agtgttggga ttacaggtgt gagacaccgc acctggataa cagtctgttg 180
ttgatcacca gtttttatat aatttttctt ttgaacacaa gtatattata aaaatacttg 240
aaaggagtat tcaaaaattg attttgaata ccgggttaaa gattcaggta tggtcgtttt 300
cctacttcga aatgcagagg aggg 324

<210> 1685
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1685
attgtttttc ttccagtttt tctttttcca aaaaagggat tcaagctggc ctgcaaactc 60
aaatggcttg tacatagttg agattaaggc aaatacacaa gattgtatcc tgtttttttc 120
agctacatta tacacaagta tcttcccttg tgataatgta gtttttataa atataagttt 180
ttaataacta atatttcatt atgtgataca tcatgattta ttatttaaa ccatttctgg 240
attgtcttgg tttcaacttg ggaagggtct acaaaattct ttaacaaaga tctggatgcg 300
gcagactcag tggcttacgc ct 322

<210> 1686
<211> 319
<212> DNA
<213> Homo sapiens

<400> 1686
tccctacata attgtgactt agaattattt agaagagaaa tattatttat gagaagaaaa 60
aataattaaa gtcataatct ttaaagctta aattttaaaa agacaaagtt taacagcaac 120
cattgagggt gaattattta ttgttttgct ctcttaacat acctttgggg aatacaaatt 180
aaaataacaa gaactattta atttattgct tatctgactg gcaaggataa aaatgaatgt 240

taacatttat cagcaagcat gtgagaaagt aggctttctc atgcactact tatgtgaatt 300
aaaattggta aaagttttc 319

<210> 1687
<211> 422
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(422)
<223> n = A,T,C or G

<400> 1687
ggcacgaggt gaacacggcc aaaggattga gtggcgaaaa tggaagcaac agaagaaaga 60
ggagaaaaaa aaatggaagg atctcaagct gatgaaaaaa ctggagcggc agcgggcaca 120
ggaggaacag gcaaagcgcc tggaagagga ggaggcagcg gcagagaagg aggaccgcgg 180
gcggccctac acactgagcg tagccctgcc gggctccatc ctggacaatg ctcagtcgcc 240
ggagcttcgc acctacttgg ccggtcagat tgccagagcc tgtgccatct tctgtgtgga 300
tgagatcgtg gtgtttgatg aggagggcca ggatgccaag actgtggagg gggaattcag 360
aggagttggg aagaaggggc aggcgtgcgt acagctggcc cggatcctgc agtacctgga 420
gn 422

<210> 1688
<211> 373
<212> DNA
<213> Homo sapiens

<400> 1688
cgttgctgtc gggctggtct tgaactcctg acctcaggtg atctgcccgc ctcagcctcc 60
cacagtgctg ggattacagg tatgagccac cacgcccggc ccatttttt ttttgacaac 120
tttttttttt ggaaacgggg ttttgtccct tggccaaaat gggagggcgg gggttggata 180
aaagttaatt gggcccggaa atcttttggc ctaaccctcc aaagtggtgg aaactacggg 240
tggccccatt agccccggct agtttttcaa tttttggaaa aaagacgggt ttttttttt 300
tgaaaagggg tttttttttt gccccaaaag tgggggggaa agccgggggct aaccctattg 360
gaagcccccg ccg 373

<210> 1689
<211> 343
<212> DNA
<213> Homo sapiens

<400> 1689
cattggtagg aggttatgct tttttctggt ttttgtttta ctttcaacct aggttataag 60
actgttattc tatagctcca acttaaggtg ccttttttaat tccctacagt tttatgggtg 120
ttatcagtgc tggagaatca tgtagttaat cccattgctc ttacaagtgt cagcttactt 180
gtatcagcct ccctacgcaa ggacctatgc actggagccg taggaggctc ttcagttggg 240
ccccaaggat aaggctactg atttgatact aaatgaatca gcagtggatg tagggattag 300
ctgattttaa aacaactcgg ctgggcacag tggctcacac ctg 343

<210> 1690
<211> 406
<212> DNA
<213> Homo sapiens

<400> 1690
ggcacgagga gagtatggaa cccttcccct tcgctctcag ccggaggcca gctgcgtcca 60

gccgggctcg gtcttctgaa caccgatttc aaatcaggtc cccggggccc agcgtcactt 120
agggaagtgg tggcattttg tggttgctcc taaatcacgg agagcagcct tggcgctgcc 180
ggtcccaact tgatccaagg agccttgaca aggagatgag attcagtacc aggggccggc 240
cgtggctccc atcctccgga atctgcaaaa tggctacttc ttcagaaata atggggagag 300
ggatggcaag aggccagaga tcaaggccct cgagtattaa cttgagcatt tgggcacaaa 360
atagacactt ttggattttc ccgtcttttc caacaccaag gatgag 406

<210> 1691
<211> 363
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(363)
<223> n = A,T,C or G

<400> 1691
cagaagttta atttttttata atgatggatg aagacagtaa tatctacctt gagtggcttg 60
tcataagtat taaataataa aaactagcat taaaaatatc tagcatacct agatatatgt 120
tatatgttat agttatatgt ttaaaaattt gtgtttattt catgccttat ttatctttaa 180
gaaactttat agcctgatcg gtgctgattc tttttccaaa aagtcacgta aaattttatc 240
aggacaatgt tttctgtaac aaccattatt tcttgtcttt ctgccataag tggagaaaaa 300
agatgtgaag gatcttgagt tttcatactt tctaaatggg ctaagagtac agatgtcaga 360
agn 363

<210> 1692
<211> 408
<212> DNA
<213> Homo sapiens

<400> 1692
cgttgctgtc ggttcgctgg gaggtatgga tttcatttcc attactaatg cctgcaattg 60
ctgataatag acgtgcccca ggaatcgctg catgggaaat ggagcaaggg tctccttctg 120
tggcccagtc tggaatgtta gtggtgcaat ctcgactcac tgcaacctcc gcctcccgga 180
ttcaagagat tctcctgcct cagcctccca agtaactggg attacacgta cgcaccacca 240
tgcccggcaa atttttgtat ttttagtaga gatagggttt caacatattg gccaggctgg 300
tctcaaactc gtgacctcaa gtcatctgcc cgcctcagcc tcccaaaatg ctgggattat 360
aggcgtgaac catcacaccg ggccattcca atcactcttc atttcctg 408

<210> 1693
<211> 443
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(443)
<223> n = A,T,C or G

<400> 1693
tagacaattc nnttttgtga aaatannacg gccctcgaat tcggcacgag ggcacttctg 60
ccgctgcgcc tgtttctgca ccgataactt gtacgtggcg cgctatgtgc tgcacgtgcg 120
cttccgaggc gagcaccagc tgcgccggga ctacggcccg atcctgcgca gccgaggctg 180
tgttagcgcc aaggacttcc agcagctgtt agcagagctt gagcaggagg tggagcggcg 240
gcagcggctg gggcaggagt catcagctag gaaagccctc atcgcgagtt cctaccaccc 300
ggcacggcct gaggtctacg actcactgca ggatgcagct ctggcccccg agttcctggc 360

cgtgactgag tacagcgtgt ccccagacgc agacctcaag ggccttctcc agcggctgga 420
gacagtatcg gaggaaaagc gcc 443

<210> 1694
<211> 374
<212> DNA
<213> Homo sapiens

<400> 1694
ctatgttgga attatttggt aaactatctg aggctcatat aatttagtat ctttcattat 60
aagattattc ttatatccat ttctataagt ttatattcta atttatgtta tattccaggt 120
agatgctgtt ttttttaaat gaatttgctc tttgcattta aatatttaaa tatatcggga 180
aatagttgtg atcggatccc ttatcttcat ttttacaacc tcatctttat cctacatggc 240
ggaccagccc ttcttacaag gaagtcggtt ttttggcgtt taaagtcaca aagatctact 300
gcgcaatcag cgcgggtcga atacgccctc actttctaca tttttcaata caacaactcc 360
gtcggggtca tttg 374

<210> 1695
<211> 389
<212> DNA
<213> Homo sapiens

<400> 1695
cctgtctctg ctaaaaatac aaaaattagc tgggcatggt ggcatgcatc tgtagtccca 60
gctactcagg aggctgaagc aggacaatca cttgaaccca ggaggtggag gttggagtga 120
gccgagattg cacaccacta tactccagcc tggcgacaga gcgagactcc gtctcaaaaa 180
aaaaatcact ctgtcaacag caacaataca ctttcttctc aatgttcatt acaagctttg 240
tgctgggcca caaaacaagt ctcagtaaat gagatagaat taaaatcacg cagagggtat 300
tctctgtccg cagtggaaat taggactcgg taagatatct ggagaaaatg ctggccaggc 360
acggtggctc acgcctgtaa tcccagcag 389

<210> 1696
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1696
tacggttgcg agatgacgac agacgggact gtgcacatgg acacaagtga tcctcagtcc 60
ttactccaaa cccacatctt tgagagacag gccacgctgg agtgctgtgg ctcgatcacg 120
gctcactgca gcttcaaact ccgcctcggc ctccataatt gctgggatta caggagcgtg 180
ccagtgtgtc tggccttaac ttgcatttct acataagact tctaaaaaaa aaggagaaaa 240
tcttcacaat cctgggatag acatggaatt cttaggacat ggaaagtaat agaatttcaa 300
aattctgctt cctgaaagac actgttaaga aagtgaggag gcaaggcaca gactaagaaa 360
atattcacat cacacacata tttatt 386

<210> 1697
<211> 359
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(359)
<223> n = A,T,C or G

<400> 1697
ccaccacgcc cgctaattat gtatttgtag cacagaccta ggtctgtcaa gttgggcgaa 60

atagaaccct cctttccttg ttcccactct tgattctttt gaacatgggt tacctccctt 120
cgcgtctttt ggaacagaag gggatcataa gctcttgagt ctctgttttc tgctgtcatc 180
tactcttcct gcctctggca cctcccagct cctgacttcc tcctgcttcc ccctggagcc 240
agagacgtgg ctgggaagag cccctggcct ttgaagccag nggtggtggt gaccaggggc 300
aacaagccac tgtgctcctg gatgcgtggg ctggcaaatc tctctcccat tcgcctttg 359

<210> 1698
<211> 399
<212> DNA
<213> Homo sapiens

<400> 1698
cgttgctgtc gaaagcgtta gtgaaatatg aagtgatgag gaatctgaaa atgaaattac 60
aagtgttggt agagcttcag gtgatgacga tggaagtgaa gatgatgaag aggaggatga 120
agatgaagag gaggatgaag atgaggatag tgaggatgat gataaaagtg acagtggccc 180
tgatcttgca aggggtaaag gaaatataga aactagttct gaagatgaag atgatacggc 240
agatttgttt ccagaagaat ctggttttga gcatgcttgg agagaattag ataaagatgc 300
tcctcgtgct gatgagatta cacgtcgatt agcagtttgt aacatggact gggatagatt 360
aaaggcaaaa gatttgctgg ctctgttcaa ttcatttaa 399

<210> 1699
<211> 388
<212> DNA
<213> Homo sapiens

<400> 1699
cgttgctgtc gctgcctccc tctgggacta agtgcctgga gagcctcctg ggctcagtgc 60
ccccgccctg ccctggcctc cacagccttc gggagctccc agacccagtg ctgagtgagg 120
aggtggtgga gggcattgct gctggcattg aggcagccct ctgggacctg acacaaggca 180
ccaatggccg agacaagacc aagtatcgca gcctgctgtt caacctgcgg gaccccagga 240
acctggactt gtttctcaaa gtggttcatg gagatgtcac cccctacgac ctggtgcgga 300
tgagctcgat gcagctggcc ccccaggagc tggcccgctg gcgggaccag gaggagaaaa 360
ggggaccgca gatgttcatg gactgcag 388

<210> 1700
<211> 406
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(406)
<223> n = A,T,C or G

<400> 1700
cccatcgatt cgaattccgt tgctgtcgga aggccgtggt gcagcgcgtc acccgggcca 60
gcgtcacagt tggaggagag cagattagtg ccattggaag gggcatatgt gtgttgctgg 120
gtatttccct ggaggatacg cagaaggaac tggaacacat ggtccgaaag attctaaacc 180
tgcgtgtatt tgaggatgag agtgggaagc actggtcgaa gagtgtgatg gacaaacagt 240
acgagattct gtgtgtcagc cagtttaccc tccagtgtgt cctgaaggga aacaagcctg 300
atttccacct agcaatgccc acggagcacg cagagggctt ctacaacagc ttcctggagc 360
agctgcgtaa aacatacagg ccggagctta tcaaagatgg caagtn 406

<210> 1701
<211> 347
<212> DNA
<213> Homo sapiens

<400> 1701
tatattaacc gactaaaaga ggaaaataac accatgggca ttcctccctt ttgcctggaa 60
ccatgttgac taaaatgtgt gcctattata agccaattgt gtcctcactt ggcgtggttt 120
caaggtaaca aagatttgat cttatttaat ctcttctcac atgtggtaga cagaattcct 180
aggtgaccca catggctttt gttccctggt gttactcgca tggtcatgtt atgttgcagg 240
acaaatgata ttatgcagat gtaattaaaa tgacttacta atcagttgac cttaggagag 300
attatctaga tggatctaac gttatctcac gagtacttta aaaacag 347

<210> 1702
<211> 327
<212> DNA
<213> Homo sapiens

<400> 1702
cgacagaagg agggttggta cccacctttg actgatgggg aaagtgacgt ttgaagcggt 60
ttatgcaagg tcctatagct caggattcaa acccaggctc tcttgcttta aagcccacct 120
gggcttttaa tactacacca aagcctcctg ttatctcgtt tgtccttgaa ccccccacag 180
agaagctgga aaaataaaaa aaacaaggac gacacacaag cagaaagtga tgacctgctg 240
tttgtagttg atcaaatgcc atcgatgctg cttatgtgac gtggtgtcca tgcaccatcc 300
atttttattt ttcaggtctt agttacg 327

<210> 1703
<211> 329
<212> DNA
<213> Homo sapiens

<400> 1703
attgcactga ttcatgtgaa tggttccgct agtcatgcac catgcggcct ctgagaaaag 60
cacaatattg aactctatcc tagcctccca gagattttta acctctactt cttccaagaa 120
tttttgttcc tggacttaga agtcagggca gaggcaagcc aggaaaggca gcaaaccagt 180
ttaacttcct cctctctctc gttgccttat atcttctttt gccccttgc tctctgcccc 240
aatcctcaca atagttaaca gctactttac ccaaatatca aactagccag agaagctact 300
gaacatgatc atttaaaaaa aaaaaaaaa 329

<210> 1704
<211> 330
<212> DNA
<213> Homo sapiens

<400> 1704
caacctgtag tatgggaaaa atatttgcaa accatacgta tgataaaggg ttaatatcca 60
aaatatgtca ggaactcaca gagctcaatg acaaaaaaaa aaaaaaaaaa agggaaaacc 120
ctttttaaa aagggacaaa gggtttgaaa aaatttttt ccaaaaaaaa acaaaaaagg 180
gttaaggggc ttttggaaag ggtttccccc tttataattt ttaaaaaaat ccaaattaaa 240
aaaaaaacgg gggccccccc tccttcaatt aaaaggggtt tttgccctta aaaaccccaa 300
aaacaaccgg gggggggggt ttggaaaaag 330

<210> 1705
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1705
ttatggcttg aagtttcatt tgccttttc ttctctatta tctaccacaa atctttaata 60
atttggttgt aatctggata ttagctttct ttagaaaata ttttatattc cttaaatctt 120
ttttaacatg ataaataata aacataaata ggaataaaga ggaatgaatt tagttcctgg 180

ctggagatga ctaaataaat tacaagtgat aatattcttt aagttattag tataatttaa 240
caaactaaag acactcaaat gatgtttcaa aggttgttga aaaaaactga taaatttacc 300
tagaaaaaaa gttttgagat aaagttaatg gcgttgaaga tgacctactg g 351

<210> 1706
<211> 346
<212> DNA
<213> Homo sapiens

<400> 1706
ttatggcttg aagggtcatt tgccttttc ttctctatta tctaccacaa atctttaata 60
atttggttgt aatctggata ttagctttct ttagaaaata ttttatattc cttaaatctt 120
ttttaacatg ataaataata aacataaata ggaataaaga ggaatgaatt tagttcctgg 180
ctggagatga ctaaataaat tacaagtgat aatattcttt aagttattag tataatttaa 240
caaactaaag acactcaaat gatgtttcaa aggttggtga aaaaaactga ttaacttacc 300
tagaaaaaac gatatgagat aacaggagtg gcggttgtca tcacct 346

<210> 1707
<211> 296
<212> DNA
<213> Homo sapiens

<400> 1707
aagctattag gaatcagtta aatgttttgg gattttgtct gagaatgggc taaaggagaa 60
tgtccctttt gccttctgaa gtttccctga aaatcactaa taggaggcag ataaatagta 120
gaaaaggcat aaaggtttct gcaatgtgtg tacactggag cccttagaac gaagacccag 180
acacacgatg cgtgcagaag cttatctacc acatgaagtt tacagaaaga atggggtctt 240
ggatcacagg aaaaaaaaaa aggttatgtg agaaaacgac cctggctagc aacagg 296

<210> 1708
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1708
aaacagcaaa tatataaaac atacaatata aacaacattg atgatatatg tatattatct 60
acatataacc cacaaaatag aaaaagaaaa tttcagtaca caggaacaat attgttcaca 120
aagtagtttt caataaactt taaagaaatt atattataca aaacacgttc tttgataaca 180
attataaatt atgaataaaa atatagtaaa atatatatta gaaactaaaa ctcctaaata 240
atccttgaat caaagaggaa atagaaatgg aaattacaaa atttttagaa tgaaattttt 300
atgtactata taaaaaatgt gtgtaataaa gccaatgtac attcatagac c 351

<210> 1709
<211> 353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(353)
<223> n = A,T,C or G

<400> 1709
ggctgcatga gctgttggca ttcctaaccc ctgtgctgtt caaggttcaa ctgtactgga 60
ttttcttgaa aattcagaag tgctggaaac cctgggcccg gatttctatg tgacagcaat 120
tttggggctg agtggcttca tttagatggg gcatgtgctc cccatattct gctctcccct 180
taacactgag gttgatgata gtgacctcaa catcaatgag gtagtgctgt ttccatgtca 240

tagaattaag aggaggttga agnatttccc cttctcactt tcagcataac tggaacaatg 300
gaacatcccc ttagggcacc atattttaag caagaaagga agagggcatc ttt 353

<210> 1710
<211> 354
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(354)
<223> n = A,T,C or G

<400> 1710
aggttttcca taaacctaga aatatgactg aagaaaaata ttccaaataa cgattagggt 60
tggcatttta gcttagtgag atcataagca tatttattta tacttagaca taaagccagc 120
aaataagatg gggaaaggaa agaaggaata aaggaggaca gagaacaatg aaggatgagt 180
cagctagttt tttaaaaaga aaagaacaga atgacgaaga aaaaggagca gaaagaaaga 240
caaccaaatg gggagaaagg gaaacaaagc tactagaaac tatgaatgta tcacttgcct 300
accatgaacc tataattgtg cttaatttgg agacaaatcc aagaaagggt acan 354

<210> 1711
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1711
gagcaggggt taggcctggt gatgcccttc tagtgaataa aatatggcca cagtgatggg 60
atgtcacttc tgaggctggg gcacatgaaa caccccactt ccctcttgct gatgctctct 120
catgctctca cttactgtaa gagaagccag ctgccccatg gagagacatt catggcaaag 180
aactggagct ggcctctggc caacagccca agaggatgga atcctgccaa cagccctgtg 240
agtgagcttg gaggtggatc attcccatgc cgacctttat gtgactgcag ctctggctca 300
caccttgact gcagccttgg taggaaaccc tgatcct 337

<210> 1712
<211> 350
<212> DNA
<213> Homo sapiens

<400> 1712
agccagcacg ggcagaagct tgaaagcccc caagtcaccc ctgggccagc agcagccacc 60
cagggcagga gggcaggtgc acagccaggg tcagcgggtc agcaactcac cctggcctgc 120
agcctaccca gcacggacca tgtgcccagt agcagagcta gaggaacaag cagaaaaatg 180
gccggccccc aaccagaggt cagagggaag ggcaggagcc gctgctgacc tcgggggaca 240
cgggtggctg acctcggggg acgcgggcac acgctgtggg gcttcgtgtc aggcacccat 300
ggggcctggg gtctgctctg tgcaacagat actgtcgggc tgcccatggg 350

<210> 1713
<211> 325
<212> DNA
<213> Homo sapiens

<400> 1713
gaccaccgcc gccgaggagt caggaagttc aagatggccg ccgcggagac ccagtcgcta 60
cgggagcagc cagagatgga agatgctaat tctgaaaaga gtataaatga agaaaatgga 120
gaagtatcag aagaccagtc tcaaaataag cacagtcgtc acaaaaaaaa gaagcataaa 180
cacagaagta aacataagaa acataaacat tcctcagaag aagacaagga taaaaaacat 240

aaacataagc ataaacataa gaaacacaaa agaaaagagg ttattgatgc ttctgataaa 300
gagggtatgt ctccagcaaa aagaa 325

<210> 1714
<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(384)
<223> n = A,T,C or G

<400> 1714
cgttgctgtc ggaaggccgt ggtgcagcgc gtcacccggg ccagcgtcac agttggagga 60
gagcagatta gtgccattgg aaggggcata tgtgtgttgc tgggtatttc cctggaggat 120
acgcacaagg aactggaaca catggtccga aagattctaa acctgcgtgt atttgaggat 180
gagagtggga agcactggtc gaagagtgtg atggacaaac agtacgagat tctgtgtgtc 240
agccagttta ccctccagtg tgtcctgaag ggaaacaagc ctgatttcca cctagcaatg 300
cccacggagc aggcagaggg cttctacaac agcttcctgg agcagctgcg taaaacatac 360
aggccggagc ttatcanaga tggg 384

<210> 1715
<211> 123
<212> DNA
<213> Homo sapiens

<400> 1715
gtggatcaaa gatttaaata taaaatgaca aaacttctag gagaaaacat acaagaaaat 60
cccgatggca ctggcagata tctcttagat gacagcaaaa gcacaattta ttaaagaaca 120
aat 123

<210> 1716
<211> 349
<212> DNA
<213> Homo sapiens

<400> 1716
cagtatcgat cccattaacc aaatctagcg aacattattg agcaatgact atgtaccagg 60
ctctgtgtta ggtgctgcca catatctgat gagtactact attactacta ttcatactac 120
cattacgaag aataacatct aacattttat taaatcctca ctggtagtga cagaaaccag 180
gctaagtgct ttacatacaa tgtaagtttt cacgaccaca aacctattaa catggcttat 240
gggtgaggcc tacctaatat gatatcgaaa cgaaacagat caacaaacaa agcatctaga 300
attgtccact gttgccttat tcaccatgag ggcatcttag agctagaag 349

<210> 1717
<211> 340
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(340)
<223> n = A,T,C or G

<400> 1717
gatgcgtgtg agctgacgcc attttttttta ggactgggtc acactctggc acgcaaacta 60

tgaggcggtg tcactatcat ggttcactgc atcctcatta taccatgagc atgcagccct 120
ccccttatc tggcgccaca ggcgcatact accatgctca gctaagtttc taaaagctat 180
tgtgtaaaaa caggatgtcc ctatgttgcc caggctggtc tcagactcct gggttcaagt 240
gatcagcctc ccaaagagat gggattattg ttgtgagcca ctatgcccag gtaattgcat 300
ctgctttaga gagaagagga caaacagata gatacactan 340

<210> 1718
<211> 325
<212> DNA
<213> Homo sapiens

<400> 1718
tcactcctgc ccctctcctc caggcaatca aactttggtt tctgtcacta tagattcgtc 60
tgcattttgg ggatatgtag atatattctg aaatactgta tattctgaaa atacactata 120
tgattctgaa gtcatacagt atattctttt tttggtctgg catcttttac tcagcataat 180
tattttagat tcatccaggt tgtaccttat tgatagttca ttcattttat tgctgagtag 240
tagtccattg tacagataca ctacaatctg ttcatccatt catctgttgg ttaacattta 300
ggttggtgta tatattttgg ctatg 325

<210> 1719
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1719
caacccacat atttattgcc attaaaagta tagataaaag caatttgaca tcaaaagtat 60
ccaacattgc acaagtaact ttgtttatcc ctcaagcaaa tcctgatgac attgatccta 120
cacctactcc tactcctact cctactcctg ataaaagtca taattctgga gttaatattt 180
ctacgctggt attgtctgtg attgggtctg ttgtaattgt taactttatt ttaagtacca 240
ccatttgaac cttaacgaag aaaaaaatct tcaagtacac ctagaagaga gttttaaaaa 300
accaaacaat gtaagtaaag gatatttttg aatcttaaga ttcattccat gtggg 355

<210> 1720
<211> 331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 1720
aatcccaact acttgggagg ctgaggcata agaatcgctt gatcccggga agtggaggtt 60
gcagtcatcc caacncatac catttccctc taaatcttac atacttcata gaccttccct 120
aaatctctca ctacattctc tttatttacc ccaatactca tatctcttga ccgactgtaa 180
tctttatttc ccctttttca ctaatgcctt aacccactcc ccttacctct atctacacct 240
tgccccctca aaacaaaaca aaaccctatt tatgtgtgga aatttattct aatacttggg 300
acctggtttt aaacccaatt tgttcttcct g 331

<210> 1721
<211> 233
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(233)
<223> n = A,T,C or G

<400> 1721
tgaataacag aacttacttc atagggttgt tataagaatt gaatgaaaag tgcacagcat 60
gacaaatagt aaacactcag taaatgttag ctattactat tactagtctg acttaaactg 120
ttatcatcac atttgatgtg ataaagaaca caaggttttc taaatagact cccatgggag 180
ctgggagggg agggtagtag atgagaatct gcttatttgt tggaattttc tcn 233

<210> 1722
<211> 204
<212> DNA
<213> Homo sapiens

<400> 1722
tgaataacag aacttacttc atagggttgt tataagaatt gaatgaaaag tgcacagcat 60
gacaaatagt aaacactcag taaatgttag ctattactat tactagtctg acttaaactg 120
ttatcatcac atttgatgtg ataaagaaca caaggttttc taaatagact cccatgggag 180
ctgggagggg agggttgtac atgg 204

<210> 1723
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1723
gagatctcag ctctctgcag cctccacctc ccaggtgcaa gtgattctac tgcctcagcc 60
tttggagtca ctaggattac aggcgcccgc caccacacct ggctaatttt tgtattttta 120
gtagagaaga gcagggatca tgatgggcta gatatgctgg acttacgagc ctgctgtcta 180
aggctttctt aatgctacca ttacaggggt gagccactgt atatggacgg ttgattgcgg 240
agtaaaataa cgtatgcttg ataagaataa gatatacaac ggagataaca cctacttgat 300
ccgttcttgc ccacctctaa ggagctatat tgaaccac 338

<210> 1724
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1724
cggggacgtg tggggactta cgactgttag accgccccga aaaaagggct ttacttgcga 60
attatgagat gctattactt aaaccgtccc caccatcatc tgcaataaat gtctttacta 120
caactacagc attcattcta tcgttcaggc tcacatctat agatgcgcaa tgctctgaag 180
gctgaggcag gagaattgct tgagcccagg aggcagaggt tgcagtgtgc cgagatcatt 240
ccattgcgct ccagtctggc gacagaacaa gactctgtct cttaaaaaga aaaagaaagc 300
aaaagttggg gggcttattt tataag 326

<210> 1725
<211> 300
<212> DNA
<213> Homo sapiens

<400> 1725
gttctgtcat cagtacttat taaggtgtct tgatgtagta agcaagatag tttttacagt 60
cctaggctta ttacaagttt agtaacccca gtggactgag aaaatctttc tcaatagctc 120
tggcaaaaaa ttcctctggg aaaatatgac tgatgggagt ttggatcatt tgcccattct 180
tgaaccaatc attgtatagt tagccctctg tatataaggg ttccgcatct gtgtattcca 240
ccaatcgcgg ttgaacaaaa ttttggaaaa cgctgggcgt ggtggagcat ccccccttct 300

<210> 1726
<211> 303
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

<400> 1726
ttcgcatttt cctgttaact aataatgctg agcatctttg catgtggcta ttggctattt 60
gtatatattc tttggttaaa gtctgtttaa ttcatttgct tctctcactt tataaaattg 120
ggctatttat cttctaatta ttgaatcata agatttcttt atatatgatg ctctataaaa 180
gtatcttgtc acatatatat atcgntattt ttctcctagt ttgtgacctg cctttttata 240
ttattaatag tatcctttgg ggagcaaaca ttttaaattt tgatagtcta atttatcatt 300
ttt 303

<210> 1727
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1727
atatagaatt tcaatacatt tactcaaaat gtggagtaag atagagttca agatcttaga 60
ttctagaaac tatatagcag gaatatgacc ataggctact tcctaacagc tgtgtgattt 120
gggtataata acttaatctc tttaagcctc atttctcctt ctgaaaaact gaagaaataa 180
cacctactcg tctgagttct taaaaggatt aaatagcgtc gtgtgtcatt ttggattcca 240
ccagcagcac agtcagggac aagtatccta acacaagaaa tttgtcatgg tggtaattcc 300
aggaaagtct ggtggagaca ggggaagtga gactgaga 338

<210> 1728
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1728
cacaaaaaac aaattgtgaa ttaaaacaaa ttatataagt aaatgcatat ttagcataag 60
aaaagaaatc ccctcaaaat accaaatttt atctaataca tactacaata cataaaaata 120
atttttttta tttattaact tcatagcata cctttctaat accacatttt ctttcttttt 180
ttttttttct tggaaacaaa gttttctaaa ttttttggcc aaggctgcaa aacaggggg 240
ggatttaagt taattgaaac ctttccttcc agggtaaaag gaattttctg gcctaagcct 300
ccaaaaaagt taaaataagg gggggcaca acattgccgg gttatatttg tgt 353

<210> 1729
<211> 409
<212> DNA
<213> Homo sapiens

<400> 1729
cgttgctgtc gctgaggttt ccttaatgtt ctttttgaat ctttgagata caggatctat 60
tacttgcatc tgagagaatt ttgatcatga gtcttgtgga gatcttttc atattactct 120
ctgaatgtat tgggataagg tgtaagggcg ctgtcttcta ctttaatctg ataatatggg 180
gaattgtgtt aatagatgtt ccaatgttcc ctatgcctta catccctagg ataaatccaa 240
ctgtgccatt ttgttaacct tacaactgtt agttaaaccc ctgtctgaca attaatatca 300
cttatgtggt catttttgct ttttaaaaca ctttatttat ttattgagac agggccttgc 360

tctgtcagct aggctggagc gaagtgggac ttctctcccc ttaactgga 409

<210> 1730
<211> 292
<212> DNA
<213> Homo sapiens

<400> 1730
atttattata ttttaacttg tgaaaggggt taaagtgata ttgtcaaatt tcatattatt 60
ccatttttaa attttattaa taaactttga tatgacttca catttttata atacatttaa 120
caaacagggt gaaaaaagag atagtatctt gatagtgctt tattattttt ctttaatcat 180
atagactata ttttcaaact ttgtatttta atatttacta tttaataaat gctatagttt 240
tcaaacatct tcttccattc tatttttttt aaactaacat ttcttatttg cc 292

<210> 1731
<211> 339
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(339)
<223> n = A,T,C or G

<400> 1731
gatggagaaa tagagctcac ctcttctggg tagagtagtg gcaaagtcac attgtanaaa 60
agcctgggag gtggaaaatt tttttcatga ttgtctttgt aaagtacaat ctactaccta 120
cactttaacc caccaattca tcttttagaa atttatcctg taagtggact tacaaatgtg 180
aacaaaaata aatgaacaag ggtatttgtt actaaaatag taatagcaaa agactggatt 240
aatctaaatg tccaataata gggttattta acccaattta tttgtgccca tgcaatgcat 300
agctatgtgc ctggcttttt ttttttttt ttggaaagg 339

<210> 1732
<211> 341
<212> DNA
<213> Homo sapiens

<400> 1732
agaggaagaa gagaaagtgg ccacagggac agggcagcaa gggtcaagcc tgcaggggga 60
gagatggatg ggtgagggct gtgagaaact cggggatacc catgcccagt gggaccaagg 120
gatggggctg gagtgcagcc acatgttcca cctcccccaa gtgccaggct gcattggact 180
ttgtcctgga gccgtgcaga gccatgggag gtttttgagc aggggctcgg aggcctcagc 240
tcatggtttc catctggttc caggctgatg gggaggcacc atcacagccc aggtcaggaa 300
ggtgagacac tcataccaaa cacttagaaa acagggccag a 341

<210> 1733
<211> 311
<212> DNA
<213> Homo sapiens

<400> 1733
atctcagaag aaaatgcaac ccacatattt attgccatta aaagtataga taaaagcaat 60
ttgacatcaa aagtatccaa cattgcacaa gtaactttgt ttatccctca agcaaatcct 120
gatgacattg atcctacacc tactcctact cctactccta ctcctgataa aagtcataat 180
tctggagtta atatttctac gctggtattg tctgtgattg ggtctgttgt aattgctaac 240
tttattttaa gtaccaccat ttgaacctta acgaagaaaa aaatcttcaa gtagacctag 300
aagagagttt t 311

<210> 1734
<211> 343
<212> DNA
<213> Homo sapiens

<400> 1734
acaaagaaaa tgaaaagcaa aattgcccag taaacaatta cattaaatgc aaatgtctta 60
aaatacagct attggcataa caaattatta aacataacca agtatatgct gtctacagta 120
aactcacttc aatataaagc agtttgaaag taaagggatg gaaaaagata cattatgcag 180
atattaattg aaaggaggaa tggctatgtt aacattagat aaagtatatt tcaaagcaaa 240
gaaaatattt tataatgata aaagaatcag gccgagtgca gtggctcatg cctgtaatcc 300
cagcacttat ggaggccgag gcaggtggat aacctgagat cag 343

<210> 1735
<211> 346
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(346)
<223> n = A,T,C or G

<400> 1735
agaggatgaa gagaaagtgg tcacagggac agggcagcaa gggtcaagcc tgcaggggga 60
gagatggatg ggtgagggct gttagaaact aggggatacc catgcccagt gggaccaagg 120
gatggggctg gagtgcaccc acatgttcca actcccccaa gtgccaggct gcattggact 180
ttgtcctgga gccgtgcaga gccatgggag gattttgagc aggggctcgg aggcctcagc 240
tcatggtttc catctggttc caggctgatg gggaggcacc atcacagccc aggtcaggaa 300
ggtgagacac tcataccaaa cacttagaan acagggccag aggccg 346

<210> 1736
<211> 390
<212> DNA
<213> Homo sapiens

<400> 1736
tctatccagt tatccatcca tccatctccc cctccctcct tccctccctc catctctccc 60
ttcatccatc catagctcta tcctatcacc catccatcta tccctttatc caatcatcca 120
gccatccatc cctctatcca atcatctatc catccatcct tctatccaat catccatcca 180
tctatccccc attcaccctc cctccatgca atcaaccatc tatccattcc catttatcta 240
acaaatcatc catccaccca cacacccacc atccacccat tcatccacca atccatccac 300
ccatgcacca tcacttaaca gagcgccaag cactgtgcca catggggata cagatcttgc 360
taaactgtta agcttcatga aggcaacggc 390

<210> 1737
<211> 420
<212> DNA
<213> Homo sapiens

<400> 1737
cgttgctgtc gggggaatat gtcctgtttc tgtttcaaga gctaccagga gccatgaggc 60
agctgcccta cttcatccgg ccagctgtcc ccaagagaga tgtggagcgt tattcacaca 120
aatatcagat gtcaggtccg attgacaatg ccatcgattg gaaccctgat tggcggcgtc 180
taccccggta gctaaagatc cgagtgcgga agctacagaa ggaacggatt acaattctgc 240
tccccaagag gccccctaag accacagaag ataaggagga aacaatacag aaactagaga 300

ccctggagaa gaaggaagaa gaagtaactt cagaggagga tgaggagaaa gaagaagaac 360
aacacaacga agaggaggaa gaagaagagt ttgatgaaga agaacctgaa gaggaaactg 420

<210> 1738
<211> 397
<212> DNA
<213> Homo sapiens

<400> 1738
ggcacgagga ggacgaggac gtcaaggata actgggatga cgatgatgat gaaaaaaaaa 60
gaggaagcag aagtaaaacc agaggtaaaa atttcagaac agaaaaaaat agccgagaag 120
ataaaagaga aagaacggca acagaagaaa aggcaagaag aaattaaaaa gaggttagaa 180
gaacccgaag aacctaaagt gctaacacca gaagaacaat tagcagataa actgcggcta 240
aagaaattac aggaagagtc agacctcgaa ttagcaaagg aaacttttgg tgttaataat 300
gcagtttatg gaatagatgc tatgaaccca tcttcaagag atgactttac agagtttgga 360
aagttactaa aagataaaat tacacaatat gaaaagg 397

<210> 1739
<211> 429
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(429)
<223> n = A,T,C or G

<400> 1739
ggcacgagcc atcttcaaga gatgacttta cagagtttgg aaagctacta aaagataaaa 60
ttacacaata tgaaaagtca ctatattatg ccagtttttt ggaagtctta gttcgagatg 120
tgtgtatttc attggaaatt gatgacttga aaaaaattac caattcactg actgtgcttt 180
gcagtgaaaa acagaagcaa gaaaagcaaa gcaaagccaa aaagaagaag aaaggtgtgg 240
ttcctggagg gggattaaaa gccaccatga aagatgatct ggcagattat gggggggtatg 300
atggaggata tgtacaagac tatgaagact tcatgtgaca ttttatcttt tcttggngtc 360
atctttatgg tgcccacaat cccttgaaca tgtagcacaa cttccttttc tttcagttct 420
gccaaatgn 429

<210> 1740
<211> 372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(372)
<223> n = A,T,C or G

<400> 1740
tatacgacag aaggggtaat cccaaaaact tgggaggctg agataggagt atcacttgag 60
cacagttcca gaccactctg gacaacagag caagaccccc agaaaatgaa aattaaaaaa 120
tggcaaagtc agaatacatg ttgaatttaa aagactacgt tttggaggtg tagctgatcc 180
caagctgtta tgagcaaccc cctaaggact gcagatggcc tggatccagg ttctgagtta 240
gagcagcaga cagtctagag ctatagccac acagagggct ggggattgcg cagcagggtc 300
tagacacgac cctgccacag taggtcgtct ccctctgttg gcacaaacag acatgacatt 360
gttggcagag tn 372

<210> 1741

<211> 341
<212> DNA
<213> Homo sapiens

<400> 1741
aattagaata attgggaaat gattggaaaa tagaaatctt aagctagaaa acatgtaact 60
aataaaagta gtttcattaa aacaaaataa ataaaagaat aactaggaat atcctaatca 120
agtaagtaat ggagagtata caaaataatt agtaaaagga gggatatatc caagatagta 180
aaaactttaa atattttgaa aaattttatg ctacatattt gatattttta agaaaacata 240
atttaccaaa actgacccca gaataaatat aaagtttcat tctgttaaca caataaagaa 300
aatgtacaaa aggctatctt tcagaaatgt accaagtcca g 341

<210> 1742
<211> 394
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(394)
<223> n = A,T,C or G

<400> 1742
cctgaatgga gtgaacaaga gggccatgca gatatcttgg aggaaagaca ttcccgggca 60
aggaaacagc aagtgcaaag gccacaaggt gggattgagt gtggtgtgtt tgaaagctga 120
actgtcacca gtgcaggagc agagtgggca aggcagagca ggggagtgat ccaggcaaag 180
gtacatttca ggaaaaattg acagtaagga gttcggattt tatgctacat gtgttggaaa 240
aaccaatgaa gggttttcag ctaggtaaca tgatccgatt tactcccttt aaagattggc 300
cgggcacagt ggcacatacc tgtaatccca gcactttggg aggccaaggc aagaggattg 360
tttgagctca ggagttcaag atcagcctga ccan 394

<210> 1743
<211> 385
<212> DNA
<213> Homo sapiens

<400> 1743
cctgaatgga gtgaacaaga gggccatgca catatcttgg aggaaagaca ttcccgggca 60
aggaaacagc aagtgcaaag gccacaaggt gggattgagt gtggtgtgtt tgaaagctga 120
actgtcacca gtgcaggagc agagtgggca aggcagagca ggggagtgat ccaggcaaag 180
gtacatttca ggaaaaattg acagtaagga gttcggattt tatgctacat gtgttggaaa 240
aaccaatgaa gggttttcag ctaggtaaca tgatccgatt tactcccttt atagattggc 300
cgggcacagt ggcacatacc tgtaatccca gcactttggg aggccaaggc aagaggattg 360
tttgagctca cgagttcaag atcaa 385

<210> 1744
<211> 420
<212> DNA
<213> Homo sapiens

<400> 1744
ggcacgagat tgcatatagt cctgatggga aatacctagc cagtggagcc atagatggaa 60
tcatcaatat ttttgatatt gcaactggaa aacttctgca taccctggaa ggccatgcca 120
tgcccattcg ctccttgacc ttttccccgg actcccagct ccttgtcact gcttcagatg 180
atggctacat caagatctat gatgtacaac atgccaattt ggctggcacg ctgagcggcc 240
atgcctcctg ggtgctgaac gttgcattct gtcctgatga cactcacttt gtttccagtt 300
cgtctgacaa aagtgtaaaa gtttgggatg ttggaacgag gacttgtgtt cacaccttct 360

ttgatcacca ggatcaggtc tggggaggaa aatacaatgg aaatggttca aaaatttggg 420

<210> 1745
<211> 389
<212> DNA
<213> Homo sapiens

<400> 1745
acgctgatgc cgcatctgta tacacccgtg gaactagcat caagattaag ataatgaaca 60
tgttcatcac cctcaaaagt tccccgatgc ccctttgaaa tcaccctttc catcctttcc 120
ccaccctcct gcccggcaac cactgatctg ctttccgtca ctatagatga attagcttag 180
attttctaga gtgatgctta tgtggaattg tacagcatat attctcatat tatctcgctt 240
ctttcactca gcataatcct gtcaacatta ttccatttgt gccatgtagc atcacttgat 300
cgtattgttg agtaggattc cattttatgg ctagatcaca atttgtttct ccatttgtct 360
attgatgggc atctgggtca tttttcact 389

<210> 1746
<211> 176
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(176)
<223> n = A,T,C or G

<400> 1746
tgggtgaata acagaactta cttcataggg ttggtataag aattgaatga aaagtgcaca 60
gcatgacaaa tagtanacac tcagtaaatg gtagctatta ctattactag tctgacttaa 120
actggtatca tcacatttga tgtgataaag aaacacaggg ttttcaaaat agaatg 176

<210> 1747
<211> 359
<212> DNA
<213> Homo sapiens

<400> 1747
gagtctcact ctgttgccca ggctggagtg caatggtgtg atctctgctc actgcaacct 60
ccgcagcctg ggttcacgcc attctcctgc ctcagcctac caagtagttg ggagaatagg 120
cgacttccac cactctcgca tttgtgatag gacttttaa aggactcgga gtccaaatac 180
taaaaacagg atggccggaa tctccagacc tgatgatctt gctgccttta tatttaaagt 240
gccaggacta tacgccgaat aatgggtgcc cccttgaag acgcaaccct gtcctttgct 300
tatgaattgg gtgttgtacc gattctcctg atatccctat aggcaattgt cggaaatag 359

<210> 1748
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1748
cagggtgaat ctgccttagg ttcctgcct tcagacagta ttctcctgcg gcaacacttt 60
gctgacaact attcttgaaa atacggggat tggtattttc atggtggttt tcatggggct 120
gagaacttag aagataatga ctgcttcctt catctgggga tgggatttaa atgtaatgga 180
gcactcactg ttttcttgag aaggtgggag atactagctt ccttataaag ataaaggggt 240
gcgagaggca ggattttagg aactcaaatc tatgtgggaa ccggcgagca tgaattcttt 300
tttctttccc aatcccaatc ttttattg 328

<210> 1749
<211> 347
<212> DNA
<213> Homo sapiens

<400> 1749
tatatgaacc gactaaaaga ggaaaataac accatgggca ttcctccctt ttgcctggaa 60
ccatgttgac taaaatgtgt gcctattata agccaattgt gtcctcactt ggcgtggttt 120
caaggtaaca aagatttgat cttatttaat ctcttctcac atgtggtaga cagaattcct 180
aggtgaccca catggctttt gttccctggt gttactcgca tggtcatgtt atgttgcagg 240
acaaatgata ttatgcagat gtaattaaaa tgacttacta atcaggtgac cttaagagag 300
attatctaga tggatctaac gttatctcac gagtacttta aaaacag 347

<210> 1750
<211> 297
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(297)
<223> n = A,T,C or G

<400> 1750
tgcatacatg ttttaaaaca tcatactgta tcccataagt ttgtacaatt actatatgtc 60
aattaaagat aaaatacaac tttaaaaaat tgtccaaaat gaaacataca gaaaatactt 120
taagaaaaag caaaagagca tcaatgagtc agtgagttat ggaacaactt caagacacct 180
aatatacacg taatttaagt ccctgaagaa aaggggtgta taaaaatatt tgaaaaaata 240
atggatgaaa ttttaaatat ttggtaaaaa ccataaaact gtagatctaa gaagctn 297

<210> 1751
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1751
aaatctttac ctagctttgt tttctaagcc ttcatcagaa tctaggcttt ttctagtctg 60
ctcctccaaa ttattctacc tgctgcccca ttatacccag tttcaaagct gcttccacat 120
gttcaggtat ttctcgttgt cagtaacacc ctacttcttg gtaccaattt tccagaattc 180
catgaactct accaccagtt aacccaatgg taactggaac atattccagc taagaaattc 240
agcagtttat taaaaattaa tggatctagg ccaggcatgg tggctcacac ctgtaatccc 300
aacacattgg gaggctgaga tgagggga 328

<210> 1752
<211> 350
<212> DNA
<213> Homo sapiens

<400> 1752
gaatgcaaaa agagaaaggc cgaccatgcg gtggaaggtg cggaggaagg ggaggggagt 60
actcatcatt gtggagggcc ccaaagcatc ggaatgggac ggcatgcaca taatgaatcc 120
ttctccctgg cgaatctaat gctgttacgt ctccatgtca ggaaagccat ttaagaaaca 180
aggatatgcc ggtcgcggag gatcactctt tttattcctg cactttggta ggcctttgtt 240
ctcacattga cttatgtcat gtattactta cctttctggc caccctcgtt tcaagaccct 300
attaatttta cttctccatc cctttttctt ggagtctccc ccccgctgcg 350

<210> 1753

<211> 338
<212> DNA
<213> Homo sapiens

<400> 1753
tcatcacttt ttaatataat gttaattaat ttgcataatt atcatgacaa gtacaagtga 60
ctttcacagg taaagaagca gacacaactg attttgactc tggtaagcaa caccactcaa 120
ggagagggtt ggaagcagaa gtgcctgagt ctcctatgga gtagcctgtc agtgactggg 180
cagcccttgg gcagtccatg tgttatgggg gaaggaagag cattaatgaa tccaatagtt 240
tggttaattc taactgaaca gtattctttt aaaatttaca tgtcccttat tttaagaata 300
atatgtttat tatatatatc ttgaaataat atgtttca 338

<210> 1754
<211> 397
<212> DNA
<213> Homo sapiens

<400> 1754
ggcacgaggc tgggggtgct ttatccttcc tgccaagtgc cgtgacactt ctgaaaaatc 60
tccaggagca agtgatggct gtaactgcac aagtgaaatc actgacacaa aaagttcaag 120
ctggggccta tcctacagaa aaggggctca gcttcttgga agagaaagac cagctgctgc 180
tcatgtacct tatggatttg acccacctca ttctggacaa agcctcagga ggatctcttc 240
agggacatga tgcagttttg agactgggag agattcgaac ggttttggaa aagcttcgtc 300
ccttggacca aaagctgaag tatcaaattg acaagctgat caagactgca gtgacaggca 360
gccttagtga gaatgaccca cttctgttta aagcccg 397

<210> 1755
<211> 316
<212> DNA
<213> Homo sapiens

<400> 1755
ttgtggctat agagttactt tgtatgattt tgatcattta aatttatcga tacttatttt 60
atgacacagt gtttggtcta tcctggaaaa cattccatat ttgcttgaga aaaaaatcta 120
tatattcctg tgttgttgga tggagtggtt attcaaaata caactctgtg ctaactttct 180
gtttagtttt tctaccaatt attgagataa tgcattgaag tctccaaata ttattgttga 240
tttgtgtttc tcttttcaat ttagcttctg tttgtatttg gggaatctat tactatgtga 300
tatgatctat atatgt 316

<210> 1756
<211> 156
<212> DNA
<213> Homo sapiens

<400> 1756
tggtaccgct tggaaaggac aagagaaggg atctgttgcg ggaagacgac cgagagctac 60
tggtgctaca agacgaaaca ccgtctctgc tgagagtaca cgaattatag gtgcttgtgg 120
gcacgcacca gtgatcgcta ctggtgcgga agggag 156

<210> 1757
<211> 325
<212> DNA
<213> Homo sapiens

<400> 1757
gcctcagccc ccaagtagct gggatgacag gtgcatgcca ccacgctggc taatttttat 60
atttttgtg gagacagggt tttgccatgt tgcccaggct ggtggtgaac tcctggattc 120

aacctttctg cctgccttgg gctcccaaag tgctgggatt acagatgtga gccattgcgc 180
ctggccaagg cttgatatta ttaagtcaat gcttctcata ttggcctaat ttatagatca 240
atgcaattat aatcagaaac ctagcaggtc tgtgggggggg cgtaaattga catggtggga 300
ctaaaaggta tgtgaaaatg caaag 325

<210> 1758
<211> 379
<212> DNA
<213> Homo sapiens

<400> 1758
cgttgctgtc gctttgattg tcattctcct gggaagccca gtctcagtcc ctcccccaac 60
actgtccaca ctgccccctcc ccactgttta tttattgcac ggatctaagt tattctcccc 120
agccagagcc cgagctcctg ctccctggga aaagtggcgt atggccctga gctgggcttt 180
atattttata tctgcaaata aatcacattt tatcttatat ttagggaaag ccggagagca 240
acaacaaaaa atgtttaagc cgggcgcggt ggctcacatc tgtaatccca gcactttggg 300
agtccaagga gggggatcgc ttgagtccag gagtttgaga ccagcctgga caacatggtg 360
aaaccccatc tctacaaaa 379

<210> 1759
<211> 112
<212> DNA
<213> Homo sapiens

<400> 1759
tacggttcga gaagaacaat aaacggttcg gcttgcttaa tacgactgaa cggttcggct 60
tcgacatgaa ccccaaagg gctggttgtc tgaataagct tgaacggtac gg 112

<210> 1760
<211> 380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(380)
<223> n = A,T,C or G

<400> 1760
cgttgctgtc gctgtcacag acacataact ggaaatgtga ttttattctc ctggatggac 60
aattgtgatg gatttttgg gttccgggct tcaggctttg caatctcatc ttctttgccc 120
ttcctcttgt cataatggaa gaggtgctgc taatttgggt tccatccttt cctgctttca 180
gagactgtcc tgtgatttcc taaaacattt ccattagttt gtttgaattt tctgattttc 240
ttcccttagg gccctccaca ggcctctgtg ctagtgcctt gaatgatggc aagtgtacaa 300
aaaaaatttt ttttcttttt aagacgtttt tgttctgtca cccaaggtga gtgcaatggc 360
gngatctngg gtcactgcan 380

<210> 1761
<211> 160
<212> DNA
<213> Homo sapiens

<400> 1761
gaacctcctg ctccagcctc tgcctcctcc attttgatgt ctagaatcag gggatccagg 60
atcatcacca aggtcatttt cccagacaga tgtgctgagg ctgtagaaag tgctttttat 120
ttggttggga gcctgtgcat aaatgcgaga ggggctgcac 160

<210> 1762
<211> 343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(343)
<223> n = A,T,C or G

<400> 1762
ttattgggta tatgcaatgt gtgtgtccat gtgtacctct cccacagtcc ctcaaatgtg 60
gagggtagaa cttccaataa actttctctc cactgtgctt acatagccca ctgcacatgt 120
cttctacatt gtattatagt tatttgttca cagatttttt ttttaccact aaactatgat 180
cttgtcaagg gtggagacgt ctttatcttt ataatccaag tgcctaggac atttcctgac 240
acatggtagg agttaaatac cttggttgaa ttaatataca aataaaacag ggagcattgt 300
ttaagaatat gaattattgg ctgggtgcgg nggctcatgc ctg 343

<210> 1763
<211> 246
<212> DNA
<213> Homo sapiens

<400> 1763
ttcctgtgac attggacaac tgaaaggcnc ttatgcagga agacatatgc ttagcacatg 60
tgccagaagc actactacca ggtctttang ctagaatcat gaaaatgtat attctcgcag 120
aaagtctacg caagtgctta ttgcaactat acttataatt gtcacagatg gaagcaacca 180
aatgtccgac aattcgtaaa tagataaacc agctgcactg tcattggtgg ctcacgctag 240
cacttt 246

<210> 1764
<211> 369
<212> DNA
<213> Homo sapiens

<400> 1764
catacctaat agctcaacag tgtatagcca attactaaca atgtcatttt tgtaagctaa 60
tgaggattcc tgacaaacca ctttatactt tcatcatcac tccctctccc aattcatcat 120
ttttttcttt agcagctcca gtctctcctt tgttctccag agcacttccc aaggtaactt 180
agaagtattt tctgggctgc agtccttaac tttaggccaa ataaaccctc tacctatagt 240
aattttggct caatttcttt ctttaggcca acactcctaa aaatcacaaa tgaagctgaa 300
tgggcattca ctttctgctt tcatcttctt ggggataaga actataaaat ccttggccgg 360
gcgcggtgg 369

<210> 1765
<211> 347
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(347)
<223> n = A,T,C or G

<400> 1765
catatttttc taagttgctt aaaatttaat tacttaaaat tacttaaaat tctaaattac 60
ttaaaaattt aattcatgtc aatgtgatca aacagatcaa tttctttcat tgtcctggtt 120

caattatgtt aacattattt tcccaggaag ataatgttcc taggaacata tagatttaaa 180
aaaccagcaa ataggaaaaa atgtaggttg tagacttctt ttccaggtag tctttgaaaa 240
atgaacagaa ttcagtattg aaaatatcta tggttctaac tttgtcactg tgtaacctta 300
aataaattac ttagcatctc tgagtctttа ctttctaaac tattaan 347

<210> 1766
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1766
ccagcctggg tgacacagtg agactccatc tcaaaaaaat aaaaaacaaa aaaaccagag 60
aataccaaga aagtgcatat ctatatatac atacatatgt gtatatattt gcataaataa 120
atccagaaga tgcctaagaa acttatttag gaatgtggga gggcatggtg catttagatg 180
aatagggagg aacagttaga gagagttcac actttgtatg ttttcatatg gttaggtttg 240
aaaccatgtg aatgtattac ttactcagaa attaaattag gccaggcgcg gtggctcacg 300
cctgtaatcc cagcact 317

<210> 1767
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1767
cgttgctgtc gataaggggc aggtcttggc cctagaggat tgagatgttt ttctaaatct 60
tagaactatt tttggataaa ttatatattt tccttcctag tagaagtgtt actgcctgta 120
actagctcaa aataccaatg cagtttctgc attctgggtt ttggttttcc ttttttttt 180
ttttttgga gtttggcttt ggccccccag gtgggggggc agggggggaa tttaatttaa 240
tgggaaaatt tggcctccgg ggtaaaaaga attccccgcc ctaacccccc ggagaaccgg 300
gaataacggg gccccccccc ccccctaagt aaattttggt tttttaaaaa aaaagggggt 360
ttaacattgt ggcccggggg gttttt 386

<210> 1768
<211> 347
<212> DNA
<213> Homo sapiens

<400> 1768
aatagtttgg ttaattctaa ctgaacagta ttctttttaaa atttacatgt cccttatttt 60
aagaataata tgtttattat atatatcttg aaataatatg tttcaataaa ttgaaaataa 120
aacacataca tacacacata cacacacaca cacacacaca cacaatgcac cacctggaaa 180
atcactataa atattcaatc attctatttc cataatgctc tcttatgcaa ggaccactta 240
caacacaata atttttaaac acagtccatg gttttagcta atactgcata tatcacataa 300
aaataggaca atatgccctt ataatgagtt attcttggta taactca 347

<210> 1769
<211> 354
<212> DNA
<213> Homo sapiens

<400> 1769
agtacattat gaccactggg tttatttcag aaatgcaagg ctgatgtttg aaattctcca 60
tattaagtaa gtaaaagggg ggaggcacag atatcaattc tccccaaatt gatacttaga 120
gtcaaagtaa tcccaaccac attcccaaca gttgttgaag aaatataggt ggattctcta 180
ttatttttct gtattgagct ctaaatagat acagaaaaaa aattgataaa attcaatact 240
tatttgttat ttaaaaataa tcatgacaca ccccgaacag aaaggaacct ttttaatttg 300
aaaaagctta tttacaaata cctatctaac cattgaaaat ttcttcttct ttct 354

<210> 1770
<211> 381
<212> DNA
<213> Homo sapiens

<400> 1770
tctacagctg agagaagaca ctgaagggat gggaaacgct gcgacctctt acagaggagg 60
aaagttcatg gacttctagc ttctagaact gtgatacaat aaactcctgc tgcttatcta 120
ctcctctgca gtattttgtc atggcagccc tagcaaacta ctatagtgac tgtgggggtt 180
aggatgacac caagcatcaa atgccactcc ctgttccaac agtgagacca ttccacagcc 240
cctgaatgac aagacaggcc ttcaaactca agactacctg gctaaggtag aagtacttta 300
gtcacaccac ttctgaactt tcttgcctac ctgcagggca agaattttta ccatttttaa 360
atgtggacac tgaagctcac a 381

<210> 1771
<211> 403
<212> DNA
<213> Homo sapiens

<400> 1771
ggcacgaggt ccctgaaaga aagttctgca tggattcctt tcatgcggtg aaggaacaac 60
aacaatattc aacttcacct tggcgtgtga gggtcgtcgc gttttataac actatccctg 120
tagaaagatt agtgaaatgt attggaagaa gtaatggaaa cgtgaatctt cctgggctcg 180
cgagtggatc ttatttggag tcctcacctt cttaaatctg atgtttgttt gaaatcacgg 240
ctgaatttcc atatatagga cagaaagaaa gaaccccaat tttttaaaga aagctccccc 300
ccccccgcc cgctttttc ctgaacccac ttggtctccc gttataaggc ggccacaata 360
aaaggcaaca attttctttt agtcttttga cgccattata ttt 403

<210> 1772
<211> 331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 1772
cctgtctctg ctaaaaatac aaaaattagc tgggcatggt ggcatgcatc tgtagtccca 60
gctactcagg aggctgaggc aggacaatca cttgaaccca ggaggtggag gttggagtga 120
gccgagattg cacaccacta tactccagcc tggcgacaga gcgagactcc gtctcaaaaa 180
aaaaatcact ctgtcaacag caacaataca ctttcttctc aatgttcatt acaagctttg 240
tgctgggcca caaaacaagt ctcagtaaat gagatagaat taaaatcacg canagtgtat 300
tctctgtccg cagtggaaat taggactcgg n 331

<210> 1773
<211> 373
<212> DNA
<213> Homo sapiens

<400> 1773
agtctgggtg acagtgagac ctcttcacaa aaaaaaaaaa gggggggggg ccggacccat 60
gggctcaccc ctggaaaccc aacctttttgg gaggcccggg gctggcgatt caaagggacg 120
gaaaacaaaa cccttctggt taaccgggga aaaccctgtg ttttcttaaa atgccaaaaa 180
aaaaatttac ccgggcgggg gggaaagccc ctgttacccc aatttctttg aagggtgggg 240

ccagaaaatg ggggaaaccc cggaggggga atttggttga aactaaaaat gccccactgg 300
actccaccct ggggaaaaaa aacaagaaaa atttctaaaa aaaaaatatc cctttgaacc 360
ccctcttttt tga 373

<210> 1774
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1774
tctcccaaag tgctgggatt ataggtgtga gtcactgttc ccagccgaga cactgtctca 60
taaaaagaaa agaaaagaaa aaaaaaaaaa gggtgggggg caggggttca caccggtatc 120
cccacctttt tgggggggcaa aggcggtcaa acccccgggg gcggggagtg aaaaactcct 180
ctgcccaacg ggcaaaaacg ttgtccttta taaggaccta aaaaataacc cgggttggta 240
cgaacctctt tgaagcggca ctaacgtgca tcctctgagg attcgtagta ttcgcctaca 300
cttcctcaca cgatgtaatg gattcacttc cttctctaac atagtagacc g 351

<210> 1775
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1775
cctataactg cttttgtggt ggctcattgg ttttaatacg atgagtttct attctaattt 60
gtctcaataa atttttaaaa taataaaatt gacccattgg ttatttttg agtgcattgt 120
ttaatttcca tgtatgtgta aagtatatga cactgttgtt gatttccaga tccatacctt 180
tgatacttga tataatctcc atcttcttaa atttttttaa gacttgatct gtggcctaat 240
gtatgatcta ttctggagaa tgttccatgt gtagttgaaa agaatgtgta ccctacaatt 300
gttgaatgaa atggtctgta aatgtcttta aggtc 335

<210> 1776
<211> 429
<212> DNA
<213> Homo sapiens

<400> 1776
gtctttttgc aggatccgcc gccatgaagg ccgtggtgca gcgcgtcacc cgggccagcg 60
tcacagttgg aggagagcag attagtgcca ttggaagggg catatgtgtg ttgctgggta 120
tttccctgga ggatacgcag aaggaactgg aacacatggt ccgaaagatt ctaaacctgc 180
gtgtatttga ggatgagagt gggaagcact ggtcgaagag tgtgatggac aaacagtacg 240
agattctgtg tgtcagccag tttaccctcc agtgtgtcct gaagggaaac aagcctgatt 300
tccacctagc aatgcccacg gagcaggcag agggcttcta caacagcttc ctggagcagc 360
tgcgtaaaac atacaggccg gagcttatca aagatggcaa gtttggggcc tacatgcagg 420
tgcacattc 429

<210> 1777
<211> 365
<212> DNA
<213> Homo sapiens

<400> 1777
cgggagtgtg ggggagggca gtgaatatga taggatacca ctcctgtgat caggttacta 60
atcagttgat ttttttagtt aatcaaaagg gaggttatcc taactggaat tgatcaaacc 120
aggtaatctc tttaaaagaa gatgaatgtc agagtgatgg tctcctcctg gccttgaaga 180
caacgcaaac tgagagaaag gggccactca gcaaggatct gagggcaacc tataggaaca 240
gacagcctac tgcacaagaa gcaagggtat cagtcatagc acaacaagga aatttctgcc 300
aaaaaccagt gagcctggaa gagaatcctg aacttcagac gagactgcaa ccttggattg 360

atttt 365

<210> 1778
<211> 373
<212> DNA
<213> Homo sapiens

<400> 1778
cgttgctgtc ggaactgggc aacatagtga cacccagtgt ctattacaaa caaaacaaaa 60
acagatgaag gcctgcattt gcctgtaggc tatagtttgt tgatccctaa ctagtaaatg 120
gtattcacat ataaccacat ggactttgca ctgcacagaa aaagtcagtt tggggagaat 180
ttcagactta catgtgaagg acagatgtca atttttattt ttattttatt tttgagacag 240
agtctcgctc tgttgcccag gctggagtgc agtggcatga tcttggctca ctgcaacctc 300
tgccccctgg gttcaagcaa ttcttgtgtc tcagcctcct gagtagctgg gattacaggc 360
gtgcaccacc acg 373

<210> 1779
<211> 408
<212> DNA
<213> Homo sapiens

<400> 1779
gggcgacaga gtgagacttt gtcacgaaag aaagaaaaag aataaagaaa gaaagagaga 60
gagagagaga aagaaagaga gagagagaaa gaacgacaga aagaaagaaa gaaagaaaga 120
aagaaagaaa gaaagagaga aaagaaaaga acgagaaagg aaagaaggaa agaaagagaa 180
agaaaggaac aaagaggaag gaagggaggg agagagagaa ggagagaaag aggaagggaa 240
ggagagaggg aacgcaggaa gaatgcatta ctgcccacag gttatctctt tatgcacgac 300
ttatgcctag acgcgctccg gtatacaaac ggcaaagctc taaaccggcg ggctcgtact 360
taccaccctt atctcccccc aaccgcattg cagccttcct accctgcg 408

<210> 1780
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1780
gacatcagaa ttgtgtatct tgatttacaa agaaaaaaaa caaaagatac tctcttttt 60
aataaactta aaatgttcac atggcaagtg ttcactcagc aaagtacttc agaacaaatt 120
tcagaatcac cagagaacca gtgaacaaag agggtgcaga gataaggaga ggcattagat 180
gataaagcaa tcagttctcc aaggagacat aacagtcctc actgtgtatg caccaaacaa 240
cacaacaccc caatacatga ggcaaactga tgaactgcaa ggagaaatgg ccaattcaga 300
tactgactgg attagaacaa atacccaaaa cttggggagt agtgctcaat a 351

<210> 1781
<211> 380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(380)
<223> n = A,T,C or G

<400> 1781
cgttgctgtc gcgcgagatg gattccgggt gctggttgtt cggcggcgag ttcgaggact 60
cggtgttcga ggagaggccg gagcggcggt catgaccgcc cgcgtcctac tgcgccaagc 120
tctgcgagcc gcagtggttt tatgacgatc cttaacttct cgcttacgtt tcacttccgc 180

ctctttcgct tcttcttccg ccccctttte cttcttctca tcccaccatt ctgatcgttc 240
tccctgcgat ctctgctcgc tcttcatctc tgcgctcctc gtacttttcc ttcctccatc 300
tcttctctct ccctcgtctg ccgccgcctt actactcttn ctagttctgt cagctcttct 360
ttctgtctcg cctctctttc 380

<210> 1782
<211> 347
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(347)
<223> n = A,T,C or G

<400> 1782
tctttttcta ctacacacac atttttagca ccaacctctg taatacatct taacagattc 60
cacatcacat tgtactgaat tcatatttte tctacttctt tgtaagtatt tttgcctgtt 120
cacatagaat attaatgtaa attgattctt tagtcacttt aaacttggca ttgactcttc 180
taagagacaa catctgagca gtcttctact tagacagcca ttcaataata gtgggatcct 240
tcaacacccc attgtcacat tagacagatc atcaaggcca aaaagtaaca aattctgaac 300
ttaaacttga cacgtgacca atggcactta atagatatat atagaan 347

<210> 1783
<211> 336
<212> DNA
<213> Homo sapiens

<400> 1783
ttttgaggga tttttaaaga aaaactacta aatttgatga ttgataacat ctgtgcagtg 60
ggctgggctt gcagggaggg ttatgagaca tggtgaggcc agagtggtca agtgactgaa 120
tattgttgag agtgagaagt gagaagggca ggagaccaga actgaggctg agagtgcagc 180
tataatgata aagacgggcc aggcacagtg gcttacacct gtaatcgcac tctgggaggc 240
cgaggtggga gaattgcttg agtccagtaa ttcaggacca gcctgggcaa tatagtgaga 300
ccccatctct acaaaaaatt taaaaattag ccaggg 336

<210> 1784
<211> 330
<212> DNA
<213> Homo sapiens

<400> 1784
gttgagactg caatgagccg agatcatgcc attccactct aacccgggtg acagaatgag 60
aacttgtctc aaaaaaataa aaaaataaaa aaaaaatgta tcaaccaaag tcatggagaa 120
ccaaaccaag ttttgtctac aaccatgatt cttacagttt ttggtttcag gactctttgc 180
attttgaaaa ataactgaac acccagaagc ttttgtttat atgaatttta tctatcagta 240
tttactatat tagaaattca agtgaggaaa aatttaaata tgtatcaatt catttaacag 300
aacatgagta aactcattac atgtaaacat 330

<210> 1785
<211> 332
<212> DNA
<213> Homo sapiens

<400> 1785
ctatacaatc tctgttgcaa ctcttcaact ctccctttgt agcatgaaaa cagtgatatg 60
ccatatgtaa ttaataaaca tggctgtgtt tcaataaaac tttatttgca agaacaggca 120

gctggtcaca gttgatctcc tagccatagt tttccaacct tatttatctc ccaaaggaga 180
tttcctttgg gagataaata aggttagatt tgatcttgag ggtgagaaac ttatgatagg 240
attaatatcc tcataaaaga agaaagaggc caggtgaggt ggctcatacc tgtaatccca 300
gcacttttgg gagggcggag gtgggcaaat ct 332

<210> 1786
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1786
gtctccatat aaatcgagta tgatttccag aaggaaagaa aacaataaat aggacaaatg 60
tgatatacaa agtagagaca ataatgggaa atttttcaga atcagtcatt ggtggagcat 120
gacacgagtg attaagtagg gtagtggtca ctaaatccaa caaaaataaa tacctccact 180
tcatgatctt catcattatc atcataatca ttgttatcat cttaagtacc atccacaaat 240
atcacaaagc tctagaatac tattgttatt gtactggaaa tgtaaaactc taaggtaatt 300
aaaacataaa tcaaatgtaa ataatatatt ttcag 335

<210> 1787
<211> 319
<212> DNA
<213> Homo sapiens

<400> 1787
gggcgatctt ttcggattat cttccatgct gtggcagaat aaaaccaaaa cattggctct 60
tcctggacct tcaacctacc agcttttgaa ctgaaccacc attggctctc ctgggtctca 120
tgccttcaaa ttcagactgc caatatcata ctgaatgggc aaaagctgga agcattccct 180
ttgaaaacca gcacaagaca aggatgtcct ctcttaccac tcctattcaa cgtaatattg 240
gaagttctgg ccagggaaat caggcaggag aaagaaataa aggtattcga acaggaagag 300
aggaagtcat attgtctct 319

<210> 1788
<211> 333
<212> DNA
<213> Homo sapiens

<400> 1788
cttcctttga aatgactttc agtttcccac tgggatagat tatatcaagt ctgcttggta 60
aatgccatgc tggaaagcaa aagtgtcctt tcaaagtatg gaatacactg aataagataa 120
gccgcggatc ccgcagtatg aggttttaaa tttattccaa aagaagaaat agaggggtac 180
atttacaagc aaagtacagg gccaggcacg ggggctcaca cctgtaatcc cagcactttg 240
ggaggtcgac gcgggcggat cacgaggaca gatcaagacc atccctgctt actcagaaaa 300
ctcccgctct actaaagata ataaaccta gcg 333

<210> 1789
<211> 316
<212> DNA
<213> Homo sapiens

<400> 1789
attaaaataa gaaaataatt ctgatattat attttactct aattttaaag ccttttttca 60
tattaagtgt ttttgttgat tcaaaattag aaaatatatc tatctctaat acttaatacc 120
cattccctaa catggcattt gttcattcaa ttgaaaacat ttagcaaaat gcctcttcga 180
catctatggg atcatttaaa aaatgttttg ggggacttaa ttataattct cctctaagct 240
tttgaagctt agctaagact attacctatt ctcttgggtt ttgctaccac catgtgctag 300
tatgtgacag atgttt 316

<210> 1790
<211> 338
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(338)
<223> n = A,T,C or G

<400> 1790
tatgtactac ggttgcgaca tgacgacaga cggtgatgta tgtggacccc ccacctctca 60
tcagcgtgga caggcatgcg ctatttgcga tcctcgttat gccctggcta taactaggat 120
gcccactctc tcgcactcct attggacata gcaccggttg gcctacattt tatcgatcag 180
gatcgagagg aggtgaggga tgttcttata ggaagagagt aagtcaaact atctttctct 240
gcaagtggta tgattgtata actatgaaat cccatagtct ccgcccaaaa gatccatgag 300
ctgatgaacc tcagcaaagt tttaggatac aaaatcan 338

<210> 1791
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1791
cagggctagc gagcctacct ctagaacctt cttgccaggg tcaacttctg agattgacag 60
ttgtctttca tgttctagca tgaaagttat ctggttggtt tgctcttatt ctagctttgt 120
ggggacttgt ataatctaat tttttgaata ggtaatacat tcacatggtt caaaatttaa 180
aaaataacaa caaaaaggtt atgctgagaa aagtctctct tactctcccg ttccctatct 240
acccagcttc taccacctcc ctaaaagtat tagtttctta tacagtatat gtgactagaa 300
tttctttata taaaaagaag caaatg 326

<210> 1792
<211> 244
<212> DNA
<213> Homo sapiens

<400> 1792
gcagtggggg agaggccatg taagtacctg gggaagatcc aggcagaaca gtttgcacaa 60
aggccctgag atgacacctc gcttggtgtg ctggagggca gtaaggggac cagagtggct 120
ggagtggggt gaataagaaa gcagaaggcc gggcgtggtg gctcacgctc atgcctgtaa 180
tcccagcact ttaagaggct gaggctggcg gatcacaagg tcaggagatt gagaccatcc 240
tggc 244

<210> 1793
<211> 336
<212> DNA
<213> Homo sapiens

<400> 1793
aaaaagatga cctaaaactg tccttatccc caggtggtgt gattttcaac atagagaaca 60
aacctaagca ttctacaaac tattataact gataagtgat attagcaaca tttaaaaatt 120
aataatttac atctccactg gcaattacca attagagatt atgatagaat atgatagaaa 180
aataattcca tttataatag caaggaaaac tataaagaat ctatgtataa atgtaacaaa 240
aatgtttaag acacatttgt tggaaaaatc acaaagtatt cataatatac ataatgaata 300
aaacacatta ataaagaaat aagtacaaag tccatg 336

<210> 1794

<211> 325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(325)
<223> n = A,T,C or G

<400> 1794
tgacactcta ttatagtcta ggctgtttac atactaccat cagggacgag gatgtctgac 60
gtaagaaatt accacgaagt atttattccc agaaggcaaa gacctcacca tgagtgggaa 120
ctactgtacg cagtagcgaa aaaacattaa ggacacagaa tatacatata tgtctatatt 180
tatatatatg cacacattta tacacacata catatataca aaacattccc tgtttttaaa 240
tatatgtatg tacatataca cacacatata tgtatgcgtg tgtgtatact gaaactatat 300
ttgcataagn ttatatatta tatcc 325

<210> 1795
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1795
gccaagatcg agccactgca ctccagcctg agcaacagag taagactctg tctcaaaaaa 60
attttccttt taaaggaaat aattatttat ttatttttga gatgagatct cactccgtcg 120
cccaggctgg tcttgaactc ctggcctcaa gcaatcctcc cacctcagcc tctcaaagtg 180
ttttggatta caggtgtgag ccactgctcc tggcaaactc gtaatttttg gtagaacaat 240
tggggtactt ctgatatgaa aacaaagctg ggccaacttc ttcacttcga tatagtcata 300
tttatccaat tttcgttcat gctgtggg 328

<210> 1796
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1796
tactatatta taagagtaga caaaaagaga caaaaatctc tgctctcaaa gagcttaaat 60
gctggtggga gctaagaagc agataaaaaa aggcgaaata atggttactt caatttagca 120
tataccaagt gctaggtggt ctcctgagta tctactaggt attacttaat ttaatcctcc 180
caacaactcc atgaggaaag tattactatt gtgcatatgg ggaaactgag acacagagag 240
attaagttac ctgctgaaga tcatgcagct cctgaaggca gaaccaagat ccaaacctga 300
tggtcttggt acaaagtcca tggtctaatt aagagctaca cttcaggcca gg 352

<210> 1797
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1797
tatgttttct tccagatgtt ttatagggta ggtcttatat ctaggtcttt gattcacttt 60
gagtttttat atataatggg agatcacatg ctgtttttga aaacgagtta aagtggtaaa 120
caatcaggag tttaaaaata tgcatctatc tttggtttta ctgacaatca tgtgatattt 180
tgttaaacat accatttaat agaaagaaaa caaactttaa cctctaatga ggctgatatt 240
ctcaatattt actttaaaaa tgtgataagc ttagagttat tagaaaaggc ctttgacatt 300
tttgttttta caaatcaact gctttcaata aagacttgaa taaatgaagc ctt 353

<210> 1798

<211> 362
<212> DNA
<213> Homo sapiens

<400> 1798
tatgttaaaa tgctcttaca cagagcccag actttccaag ggttattctt tgtgtgagtg 60
tgtgagtgtg agtgtgcgtg tgtgctcaca aatagaggcc cagcacgctt atactacaaa 120
gagagaggtt actcggggga atatactaac accggaaagg gttactaatt taaatgctga 180
gggtacagac ctacctcacc ttgtgaagcg cactatctct cgactgggca cggttacata 240
cgtctgcagt tctagcactt tacgaggctc gagcctggtg gatcacgatg tcaggagttc 300
gagaccagcc tgtgcaatat gggcaaaccc ccgtctctac tattcatact tatattagct 360
gg 362

<210> 1799
<211> 372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(372)
<223> n = A,T,C or G

<400> 1799
aagattgttg tatcgccata tctatttcta ctttgtaaca gtagcttttt tttgccacgt 60
ttaatgactg atcacaaagt gagatattta aatatatata tacacacaca catatatgca 120
tatatgtgtg cgcttgtgtg tgtgcgtcta tatgatagat acttgccaca tgtttaatga 180
ctgatcagaa agtgagattt taaaatatac atatatatac acatgtgtgt gctttgagag 240
cggtgtgtat atatatatga tagatactta gctgatcttc acaccacaac attaatctgc 300
ccaccatgaa cagaagcact gctatcaagt atcagccttc ttgtataata acaggaaatt 360
cagaacattg an 372

<210> 1800
<211> 278
<212> DNA
<213> Homo sapiens

<400> 1800
gttggttttg tttttacgat agtttatcac aatctgtcag tgttttaaat gcatgtatct 60
tttgatcccg cagtttctat aacattctct cttacggata tacccatact tgtggtcaca 120
tataccatat ttcatccaat ctaaaacact ctaaatagta caaagtgcta ttattttatg 180
taccattaag aaaacaaaac ctaccgcttt aactatgaca cagtcctttc atatcactta 240
gaattgcgtc ttatactcat taagaccgct cctagctg 278

<210> 1801
<211> 357
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 1801
agacaaggtt tcaccatgtt ggccaggctg gtctccaact tctggctcaa gtgatccacc 60
cacctcaacc tcccaaagtg ctgggtttac aggtgtgagc caccatgccc agccctacaa 120

ccaactggtt tttgacaaag gcaacagtaa tacacagtgg ggcaaggaca ttctcttcag 180
taaatcgtgt tgggaaaact ggataaactg cagaacaaaa ttagaccctt atctctcacc 240
atatacaaaa atcatcttgg gttataaaaa aaacaggacc tgaaactatg aaactactag 300
gagaaacaag aaaagctatg tgacattgat ctgcaccatg attttgtatc tatgacn 357

<210> 1802
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1802
ccccttcac ggctttgcac aagtggcctt ttataaaatt accacttgct gtttgccatt 60
ctgcctctga gggactgaat ttccaacccc ccatgggatg gtataaggag atggggactt 120
tgggggggtaa ctaggtttat aagaggccat aaggggcttg gcctagaggc tcacacctgt 180
aatcccagca ctttgggagg ccaacacagg aggatcactt gggcccagta gctcaagacc 240
agcctgggta acacagggag atcctgtctc aaatcaaaat aattaaattg ttaaaaagat 300
aagaatatga tagaacaggg catgaaggtg gggcccccgt gatggcctta g 351

<210> 1803
<211> 410
<212> DNA
<213> Homo sapiens

<400> 1803
ggcacgaggt cggcggaaag tttggctgcg cgggttcccc cgaagttcag agtgaagaca 60
tttccacctg gacacctgac catgtgcctg ccctgagcag cgaggcccac caggcatctc 120
tgttgtgggc agcagggcca ggtcctggtc tgtggaccct cggcagttgg caggctccct 180
ctgcagtggg gtctgggcct cggccccacc atgtcgagcc tcggcggtgg ctcccaggat 240
gccggcggca gtagcagcag cagcaccaat ggcagcggtg gcagtggcag cagtggccca 300
aaggcaggag cagcagacaa gagtgcagtg gtggctgccg ccgcaccagc ctcagtggca 360
gatgacacac caccccccga gcgtcggaac aagagcggta tcatcagtga 410

<210> 1804
<211> 406
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(406)
<223> n = A,T,C or G

<400> 1804
cgttgctgtc ggcgatcctt cccggcaact ttttcgagaa aaatgcccaa attcaaggcg 60
gcccgtgggg tgggggggtca ggaaaaacat gcgcccctgg ccgatcagat cctggctggg 120
aatgcggtgc gggcgggggt ccgggagaag cggcggggtc gcgggacagg agaagcggag 180
gaagagtatg tggggccccg gctgagccga cggattttgc agcaagcacg gcagcaacag 240
gaggaactcg aggccgagca tgggactggg gacaagcccg cggcgccgcg ggaacgcacc 300
acgcggctgg gtccaagaat gcctcaggat ggatcanatg acgaggacga ggagtggccc 360
accctggaga aggctgccac aatgacagca gcgggccatc atgcag 406

<210> 1805
<211> 329
<212> DNA
<213> Homo sapiens

<400> 1805

gagcacacct gcacacactg gaacacacct atgcacacct gcacacacct gcaacgctca 60
tcgtccctat gtgacctgga gcaagttatc taacctcttg gtgcctgagc ttccttatct 120
gtaaggtgat agtgatgatg ccccccccca gagagctgtc atgagaatga aatgaggtga 180
cgcccttaca ggtgtgtaag ggcgatacct ggcacactgt ggggccatct gagggttgct 240
catcatcccc catcccggga gcttgccacc gtgcccaggt gtgcagccca cagacagctg 300
cagctgccat ggtcacagga gatcacaag 329

<210> 1806
<211> 321
<212> DNA
<213> Homo sapiens

<400> 1806
aaatacaaca gagaagctca acagagccaa aaattgtttc tttgaaaata ctagtaaaac 60
tgactaacct ctgatgtgac tgaccagtaa caaattagtg atgcaaaaat aacccatgag 120
gaatgaaaag aggaacctaa ttacagatgc cacagagatt aaaaagatag aagaatacaa 180
tgaactttat gccaataaat cttaaaagtt agatgaaatg aactcctgaa aagaaaactt 240
aaactgtccc aagtagaaac agaaaacttt gaatattcct aaaactactt cagaaaatga 300
atcagtagtt aaaaatctac c 321

<210> 1807
<211> 399
<212> DNA
<213> Homo sapiens

<400> 1807
ggcacgagaa gaactcttgc tcacatcatc taagagattg cacctgctga cctagagatt 60
ccggcctgtg ctcctgtgct gctgagcagg gcaaccagta gcaccatgtc tgtgactggc 120
gggaagatgg caccgtccct cacccaggag atcctcagcc acctgggcct ggccagcaag 180
actgcagcgt gggggaccct gggcaccctc aggaccttct tgaacttcag cgtggacaag 240
gatgcgcaga ggctactgag ggccattact ggccaaggcg tggaccgcag tgccattgtg 300
gacgtgctga ccaaccggag cagagagcat aggcagctca tctcacgaaa cttccaggag 360
cgcacccaac aggacctgat gaagtctcta caggcagcg 399

<210> 1808
<211> 129
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(129)
<223> n = A,T,C or G

<400> 1808
gcttccggtg ggcttggtac tgatcgcncc aggctctaca gagtgacggt ttaattcctg 60
ggtcctggag ctacttctgt ggttccatgt ctggatctgt atgttccagt aagcgtactc 120
ggtaatctg 129

<210> 1809
<211> 387
<212> DNA
<213> Homo sapiens

<400> 1809
cacctcaatt aaaaagcaga tactgctagt ttggatgaaa aagcaagata caactatata 60
ctgcctataa gaaatagact ttaaatataa aaacacaaat aggtacaata agaatatgga 120

agaagatatt ccatgttaac aataaaagaa agctgaggtg gctatattac tcaaagtaga 180
ctgcagtgca aagaatatta taaagaataa aggtcattat aatgataaaa ggtcgatttt 240
atcattatgt tctctgacta caatgtaatt aaattagaaa tcaataacat gagattatct 300
gaaaaatact tggggaaaaa atacacacgt ctaagtaacc catgggtcaa ataagcaatc 360
aaaaggaaga ttaggaaata ttctgaa 387

<210> 1810
<211> 388
<212> DNA
<213> Homo sapiens

<400> 1810
cctctgaaac ttgggttgcc catccaaaga gggggtgaca atcctgtctt gccaagactg 60
ctgtgaggat tcagcttata agtcataaaa tgtagtcggc tggctgggca cagtggctta 120
cacctataat cccagcactt tgggaggcca aggcaggagg atcactagag cccaagagtg 180
tgacaacatc gtgtgccatg gagagagacc ccatctattc aaaatacaaa actatatgtg 240
cgcgggggcg cgtacctctg gattcccatc ctcgcgaggc gctgacgcga gctaatgtga 300
tcagcccgga cggctaagcg ttcaccgacg cgagtatgcg ccactgctta tccctctgtg 360
caacagaaaa cgacttttct gaaagata 388

<210> 1811
<211> 345
<212> DNA
<213> Homo sapiens

<400> 1811
aaaaatccaa gttcatttgg gatcttgttt acttatcatc tagataaaaa gtttgcaaac 60
tatagccaaa gggcccaatc ccacctgcca cctgatttta taaataaagt tttactggag 120
cataactgca cctatttgtt ttgttttgtt ttttgagtcg gagtctcgct gtgttgccca 180
ggctggagtg cagtggcacg atctcagctc actgcaagct ccgcctcttg ggttcacacc 240
attctcctgc ctcagcctcc cgagtaggtg ggactacagg cgcccgccac cacgcccggc 300
taatttttg tatttttagt aaaaatgggg tttcaccgtg ttagc 345

<210> 1812
<211> 283
<212> DNA
<213> Homo sapiens

<400> 1812
tttacctcat tggttatatg tactcctagg tatggtgggg tttttcttgt gcatgacgca 60
agtattaaat taaacctctc atgttatact ttatcttatt ccttacaata gctcagacag 120
tagatcatct ctgtttccac tcaaatgcac cagaagcctg agtgtgtatt ttatttattt 180
atttaaaaac tgaatatcac tctgttaccc atgctggagt gtggaggggc catcataaat 240
tattgcaacc tttaacactt agtcttaaag gattctccca cct 283

<210> 1813
<211> 331
<212> DNA
<213> Homo sapiens

<400> 1813
caaatatcct cagtaaagta ctggcaaaca aaattcaaca gcacattaaa agatttatat 60
gccgtgatca agagaaattt atccctgggt tacaacagtg gttcagcata tataaatcag 120
ttaatgtgat atatcacatt cacagattaa aagcaaaaaa cacatatata cctcaataga 180
tacagaaaaa tatttttaa actcaacatc cattaatgat aaataatatt taacaaaata 240
ggtataaaaa acttacctca atactaacat aataattaat agacaaagaa gcctgaaaac 300
tttttctcaa ggacccagta gaaaacaagg a 331

<210> 1814
<211> 335
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(335)
<223> n = A,T,C or G

<400> 1814
tttccgtttg ttgagacttg ttctatagca caaaatatag tctaatttgg aaaatgttct 60
gtgtgcattt gaaaaggata cacatttgaa aaagacatgc tattgttgaa tagagtgtcc 120
tatcattatc tgttaggtta agttgttgac aatgttattt cagggttctt tgtagatttg 180
cttatttctc tttctagntc catttgtttt tgcctaacat atttaaaatt ctgttattag 240
tgattaattt tttaggactt ttatgtcctt ttgatgaaat gactcactgc ttattagtaa 300
atgaccttcg tgaactcttg gtttcattct tgggg 335

<210> 1815
<211> 331
<212> DNA
<213> Homo sapiens

<400> 1815
catttacata tacttgaaaa tcattgctat taatttctaa tttatttttct ctttttgtca 60
gataatacac ttcgtaggat ttgaaaccct ttccgtttgt tgagacttgt tctatagcac 120
aaaatatagt ctaatttgga aaatgttctg tgtgcatttg aaaaggatac acatttgaaa 180
aagacatgct attgttgaat agagtgtcct atcattatct gttaggttaa agcgctgaca 240
atgttatttc agggttcttt gtagattagc ttatttctct ttctagctcc atttgctttt 300
gcctaacata tgtaaaattc tgatattaga g 331

<210> 1816
<211> 322
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(322)
<223> n = A,T,C or G

<400> 1816
tctatccagg tatccatcca tccatctctc cctccctcct tccctccctc catctctccc 60
ttcatccatc catagctcta tcctatcacc catccatcta tccctttatc caatcatcca 120
gccatccatc cctctatcca atcatctatc catccatcct tctatccaat catccatcca 180
tctatccccct attcaccctc cctccatgca atcaaccatc tatccattcc catttatcta 240
acaaatcatg catncaccca cacacccaac attcacccat tcattcaaca atccattcac 300
ccattcacca ttacttaaca ga 322

<210> 1817
<211> 298
<212> DNA
<213> Homo sapiens

<400> 1817
gtacacacac atgcatatac atatgtatgt gtgcgcatat gcatacacgt ccatacacgt 60

gtacatatat gtgcatgtgt gcgtgcatac acacatgtac atacatatgg atacatacac 120
atgtatacat atacatgcat gcaggcacat gtatacatgc atacatacac atgtatttaa 180
gccagagatt gcacactggt gccctaagag ctggatattg gcccagatgt gttttctttg 240
gtctacatta aatttttttt ttcctttttg agacagaatc ttgtcctgtc acccaggc 298

<210> 1818
<211> 345
<212> DNA
<213> Homo sapiens

<400> 1818
gggcaggtct tttccttctt cctccacttc ccctaccctc caccgtccgg gagccgccgc 60
caccgccgcc gaggagtcag gaagttcaag atggccgccg cggagaccca gtcgctacgg 120
gagcagccag agatggaaga tgctaattct gaaaagagta taaatgaaga aaatggagaa 180
gtatcagaag accagtctca aaataagcac agtcgtcaca aaaaaaagaa gcataaacac 240
agaagtaaac ataagaaaca taaacattcc tcagaagaag acaaggataa aaaacataaa 300
cataagcata aacataagaa acacaaaaga aaagaggtta ttgat 345

<210> 1819
<211> 350
<212> DNA
<213> Homo sapiens

<400> 1819
tgatttctca ccctcccaaa cacttacctt atttttttct ctatatctgc atggttttgt 60
ttccttaata tattccagga aatttatttt tgggttggcc tactggagaa gttatgatga 120
atagaaaagt gtgaagaaga accttctatt ctcctcacag tatacggcaa agagcgtgca 180
attgccccca caatatcatt gtggaaaggt catattactg agactagcta gtaacacatt 240
agcttacaga attctcattc ttacgctata atattacctt cctcatcaaa cttacctgac 300
cgcatgcttg atgttggctg attaagacat aacacgctgg tatttaccaa 350

<210> 1820
<211> 269
<212> DNA
<213> Homo sapiens

<400> 1820
cagcctccta cagactttta agtgccatga gtctcaggca attaaaacta gaagtacttc 60
tacgtatgat ctattaggtc ctaaaagact acttctatat tcatttgttc caaagttcag 120
agtgacacat actatccaag agacagctaa tggtttttgt tctggcacat gacttgttca 180
tatctacaca agttcacaaa ttgaaaattc ttaagagttt ctggccaggc acagcggctc 240
atgtctataa ttccaacacc ttgtgagga 269

<210> 1821
<211> 390
<212> DNA
<213> Homo sapiens

<400> 1821
cgttgctgtc gctgctttgt agagaataga atataggaaa gcaagaatgg aaacagagct 60
attaggaggc tattggagaa taatgcagat gagagattat tacactgtct gaactaagga 120
ggtggcggta aaggtgtaga gaagatggat ttttttttaa acggtcccac tgtctagagt 180
gcagtggcgt gatcacagct cactgcaacc tagacctcct gggctcaggc gatcctccca 240
cctcagcatc ctgagtagct gggactatag gcgcatgcca ccatgcctgg ctaatttttc 300
gtatttttt gtagagattg ggtctctcca cattgccccg gctgctctcc aacccctgag 360
ttcaagtgat tcacctcccc tggcctccca 390

<210> 1822
<211> 388
<212> DNA
<213> Homo sapiens

<400> 1822
cacacctgta gtcccagcta ctcaggaggc tggggtggga ggaacacttg agcctgcatt 60
tcgaagcttt gcattgatgc tgcaccccag cctgggtgac agagcaagac ccggtctcaa 120
aaagaaaaat aaaacactaa tcccttcctc agaagaggag gtaaaatcct tgagtgatgt 180
ttactcttct tcatatccca taactcagat attatgatgc aaaattaata atacttaata 240
ctatgacata aagttaatac atcttatgtt acattatgag ggaataaaag agaaaagaaa 300
atgaagatat ttgcttgata tacacacaca taaacatata aataacaaaa tgaggaaata 360
ctcatggcaa tcatagtcct agggtcca 388

<210> 1823
<211> 363
<212> DNA
<213> Homo sapiens

<400> 1823
cagaagaagg attgattatg atacttactc agaattttcc aaaactgata aagtacatta 60
gccaacagat tcaagaagct ctctgactct aagctgaata aaaataaaac cactttagca 120
aaaaatctaa ctctaagctg aacaaaaata aaaccactcc tagcaaaaac aaacaacaaa 180
aacttcaaag aagcaacagt ataactgatt actgctcagc aaaaaatgat gcaaaccaaa 240
agacaataag aagaaatctt taaaatactg taagaaaatt actgttcacc tagaatttta 300
tacccaatta atatatcctt caaaactgaa tgcaaaatag agatgtattc agacaaaaac 360
cag 363

<210> 1824
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1824
tttctaaaag tactaaaaca gccttaaaaa taacaaggaa aacccaattt aaaatttaa 60
tacttattgt aaagctagaa taattgattc tgcatggttt ggaaaaacaa gatatattca 120
gcaatgaaac aggatagaaa atcaagtaat agacacgcat atatgtggtc aatcgatgtt 180
caacaaaact gccacggcaa ttcagtagaa gaaaagcaat ctcttcaaga tacgttgctg 240
gaacaattgg agagccatct acaaatgaac ttcaatcttt atctacctca acaagaaaca 300
cagaatagat gagaaaacaa atgtgggagc taaaaatgta aatattctag aagta 355

<210> 1825
<211> 388
<212> DNA
<213> Homo sapiens

<400> 1825
cgttgctgtc ggcgtctacc acggcctgcc cgccagccac atggagctgg cccaggagct 60
catggagact tgttaccaga tgaaccggca gatggagacg gggctgagtc ccgagatcgt 120
gcacttcaac ctttacccca agccgggccg tcgggacgtg gaggtcaagc cagcagacag 180
gcacaacctg ctgcggccag agaccgtgga gagcctgttc tacctgtacc gcgtcacagg 240
ggaccgcaaa taccaggact ggggctggga gattctgcag agcttcagcc gattcacacg 300
ggtcccctcg ggtggctatt cttccatcaa caatgtccag gatcctcaga agcccgagcc 360
tagggacaag atggagagct tcttcctg 388

<210> 1826
<211> 354

<212> DNA
<213> Homo sapiens

<400> 1826
ctccctgcaa actcaacctc ccaggctcag gtgattctcc cacatctagc ttaatgtatt 60
aatgatgtaa tagacaatta ctggccaggc gcggtggcca gagcgagact ccatctcaaa 120
aaagaaaaga aaagaaaaga aaattactgg cggcaagcag gaacattgta gattttgaaa 180
ctgtcttgtt ttacaagata ctgaagcaag gtggtgcaat tattacgtcc ttctaaagct 240
gatcggataa aggctttaat tttgtaattt tcagagaata ttaccaatgt agcaagattt 300
accaataacc aatggttgct tgaagacaaa agaggttgtt ggaacttgct taat 354

<210> 1827
<211> 342
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(342)
<223> n = A,T,C or G

<400> 1827
aatgggggcc tcgaagatag taatttctta tgtcctaagc taggggtat gcatatggga 60
gttcgtttta ttgccattct gtatgactca cacatgtcag aaatattctt tggtcttgta 120
ttttaaaata caagtgggcc aggtgtggtg gctcacacct gtaatcccag cactttggga 180
ggccgagtca agcggatcat ctgaggtcag gagttcaaga ccagcctggc caacatggtg 240
aaaccccgtc tctactaaaa atagaaaaat tagctgggtg tggtggcaca cacctgtaac 300
cccttgngag actgagggag gagaatccct tgaacccagg ag 342

<210> 1828
<211> 373
<212> DNA
<213> Homo sapiens

<400> 1828
actacggttg cgagatgacg acagacaggg atactgtggc actgacctca accctggggg 60
acagagtaag actctgtctc tgtcaatatt gtgatgctat tgctttttt gtaactttta 120
taccgctgag aacacagaga gactgcgacg tatagaccct actaagggct ttttgtctgg 180
ggagcgtgtg ggggagtaga agtaaacttt taaaaattca agatagaatc gtgatgagca 240
agcctcatgc acatgcatga ggatggctac taccaaaaag gcagaagata acaagtgttg 300
gtgaggaagc agagaaactg gaactctcat gcagtggggt tgagaaggta atatagtgca 360
gccgcggctg ggt 373

<210> 1829
<211> 350
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(350)
<223> n = A,T,C or G

<400> 1829
tattactgct ttcttttgtg ttaaatagga tttttctaat gtactatttt aattcctgtg 60
tagtttcttt tgctatctat ttttgtagga ctattaatac taaatttata ataacctagt 120
ttaatgtcta cttaatctca atattttgta aaaactttgc tcttatacag tcccatttcc 180

tcttctttta tttatctatt ggtgctgtgc aaattgtatc tttatacaca gtatgcccat 240
cagcacggat ttataattat tgctttttt ataccattgt cttttanatc aaacaggaaa 300
aatattagaa acaaaaaatt catctatact ggctttttata tctacttatg 350

<210> 1830
<211> 240
<212> DNA
<213> Homo sapiens

<400> 1830
tacggctcca aaaaaacaac aaagggtacc gcttgcaaaa tactacaaaa gggttccgct 60
gccaaaatac tacagaaggg taccgctgcg agaatactac agaagggttc ggctgggga 120
atactacata agggttccgt tgcgagaaaa tctataaaag ggtccggctg ggagaaaact 180
acagaagggt acccgctgcc gaaaagacct cataaagggt tctcgctgtt agataaattg 240

<210> 1831
<211> 131
<212> DNA
<213> Homo sapiens

<400> 1831
tacgggtgcg ataagacgac tgaagggtac ggttgctata tgacgacata tggggagcca 60
gtttctatgt ctttggaagt gtcgtgtagg tggtcatctc tgcttatctc cgccttctct 120
taacgtccgg c 131

<210> 1832
<211> 330
<212> DNA
<213> Homo sapiens

<400> 1832
taccgctgtg agaacactac tgaagggtcc ggctgcgata cgactacaga agggcaccct 60
gatcactact gctggcatcc acgcctgcca tccacaggct tggggacatg tccaccttgc 120
ccaccttgcc cactgccacc accactggtg cccaacgact atctggtcta gagttttcat 180
gcctagcaaa gcctcaaaca gtcttcagta acaaacacag gctaagccaa tgagaaactc 240
atagatacca ctgacactag ttatagctac ctaaatactt cagaggctac actactgccc 300
taccctgtat caccaccaaa gcctcctacc 330

<210> 1833
<211> 373
<212> DNA
<213> Homo sapiens

<400> 1833
gattgcataa gctaaggagt ttgagaccag cctgggcaat atggcaaaac cccatctcta 60
caaaacatac aaaaattagc caggtatggc agctcgcacc tgtagtccca gctacttggg 120
gggcagaggc gagaggatca cctgagactg ggaggttgag gcagcagtga gttgagatca 180
tgctactgta ctccagcctg ggcaacaaag tgagaccccg tttctttttt ttttttgaaa 240
acaaagcttg gttttgacac caagctgggc gtccagggcc ccaatttgtg ttaatggaag 300
gcttggcttc caaggttcac accatttttt gggtaaagcc tccaaaagaa cttggaacat 360
aaaagccccc cct 373

<210> 1834
<211> 393
<212> DNA
<213> Homo sapiens

<400> 1834
ggcacgaggt aatcccagct actcgggagg ctgaggcagg agaattgctt gaacctggga 60
ggtagaggtt gcagtagccg agattgcgcc attgcactct agcttgggaa acaagagtga 120
cactccatct caaaaaaaaa aaaaaaaaag ggggtccttt ggaattttta aaaaaaaaaa 180
aaaaggggag gggggaaggg aaaaagggat caaaaagggc caaaaaaaaa gggggaggga 240
ttttgggggc caaatttgaa aaaggggggt ttccccttt gaaaagggcc attttttta 300
acgggtgaaa gtttccaaaa aggccggggg ggaaaaaaaa ggggggttaaa ttttttccc 360
aaattgggaa aagacccctt tgttttttt cca 393

<210> 1835
<211> 376
<212> DNA
<213> Homo sapiens

<400> 1835
cacctcaatt aaaaagcaga tactgctagt ttggatgaaa aagcaagata caactatata 60
ctgcctataa gaaatagact ttaaatataa aaacacaaat aggtacaata agaatatgga 120
agaagatatt ccatgttaac aataaaagaa agctgaggtg gctatattac tcaaagtaga 180
ctgcagtgca aagaatatta taaagaataa aggtcattat aatgataaaa ggtcgatttt 240
atcattatgt tctctgacta caatgtaatt aaattagaaa tcaataacat gagattatct 300
gaaaaatact tggggaaaaa atacacacgt ctaagtaacc catgggtcaa ataagcaatc 360
aaaaggaaga ttagga 376

<210> 1836
<211> 294
<212> DNA
<213> Homo sapiens

<400> 1836
gcgatgtcta aaaccaaata gggaaaatat aaaaccaggc tgggcaaggt ggctcatgcc 60
tgtacaatgc ttggcacaat gcctggcaca tggaggccaa ggtgggaggc tcacttgaga 120
ccatcctgga caacgaagtg agaccctgtg tcaaaagaaa aaaacagagg gagagagaga 180
gcgcgaaaac tacaaacgag aggtgacaat cttccggggg ggcttatttt gaaaaatttt 240
tccgcctgtt tctcacttaa aaaaaaaagg gccacacttc taagaaaaag gggg 294

<210> 1837
<211> 345
<212> DNA
<213> Homo sapiens

<400> 1837
ctggccaaca tggagaaaac cccatctcta ctaaaaatac aaaaattagc tgggcgtgca 60
cctgtaatcc cagctactcg ggaggctgag gcaggagaat cgcttaaacc caggaggcgg 120
aggttgcagt gagccgagat catgccactg cactccagcc tgggtgacag agtgagaccc 180
cgtctcaaaa caaaccaaca aaaaacagag ccaggtgtag tggtgtgcac ctggaacata 240
acttctcaca acgctgccgt gggaagactg cttgaacctc caggagcgcg aggaacactc 300
tggtcatacc aaccgaggtc tcaaatttca aaggcatttc tattc 345

<210> 1838
<211> 262
<212> DNA
<213> Homo sapiens

<400> 1838
tgggcatggt ggcaaacgcc tgtaatccca gctactgggg aggctgaggc aggagaattg 60
cttcaacccg ggaggcagag gttgcagtga gctgagatcg cgccattaca ctccagcctg 120
ggcaacaaga gtgaaactcc ctctcaaaca aacaaaaaca aaatatctat ggtgcatgta 180

ccaagccagt aacattgtgc ccaacaccaa ctctatgcag catccttcca tgaaaccact 240
gtattgaaac tgtcatcttg gg 262

<210> 1839
<211> 298
<212> DNA
<213> Homo sapiens

<400> 1839
aactgttgta tttttaatag acaatttcac gacgttggcg aggctggtct tgaacccctg 60
acctcaggtg atccacccgc ctcagcctct caaagcgctg ggacaggcgt gagcaccgt 120
gctgggacag tagtaacttc taatggataa tgtatgcgtg gggtggaaag gggagtacca 180
gtatttttat ttcaaacaca tatacaaaac accagcttgc aattcaccct gaagaaccct 240
cagcacagag cagtttcata agtccatgcc atcgtgccat atgccttctt cactggcc 298

<210> 1840
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1840
ataacctcta tgcatacttc tttttagctg aagtatgcca ggcctgtctc taacatatta 60
tgcatatttg tgataccatt aagtagagag ggtttttaaa taataatctg actcaaaaga 120
aaaagacaaa attgaatata atgaactcca aggagataca ggaattgtac agattgctta 180
gagtataaga aacttgctta agtatgtgaa acttgattgt gattagaaaa aaaaatttat 240
ttaatcctgt tgttcctagt tattcaacat ttggacgcca taaaagaaaa aatgggctgg 300
gcacagtggc tcacacctgt aatc 324

<210> 1841
<211> 129
<212> DNA
<213> Homo sapiens

<400> 1841
taccgctgcg ataagacgac acatggctgc ggttgcgagt actcaacaga ctgggacggg 60
tgggagacct cgacacaggg gtgcggctgt gagaagaccc aagatagtgc cgctgcacat 120
aagactacg 129

<210> 1842
<211> 249
<212> DNA
<213> Homo sapiens

<400> 1842
tggtatccac aggaggtcct gtaagcaatt tcctgtggat acttagggat gactgtacat 60
ggttataaaa ggaaattgat cagagttaaa gagagattta gtgagctgaa gaaagtcagt 120
agaaaatatc tagactgaag catgcaaaca aaatatatgg aaagtacaga aaatagcatt 180
agagatgtac agaaccttat gcaaagggtg aatatgaagg aacctggaga tccccaaggg 240
agagagaat 249

<210> 1843
<211> 344
<212> DNA
<213> Homo sapiens

<400> 1843
caaaccacca ccactaagta aaccaaaaca tgcatgatca actggaaaaa aaatgcaact 60

catagcaaag actatacata aagagctttc agaataaaga agaaaaagac caacaacata 120
gtgggaaaat gtctgaaatt caaaacacac tccacataaa aataaacaca aaatgacatt 180
taaatacatg aaaatatgat caaccttact tataataaca gaaatataaa ttaaagctat 240
aacaaaatac catttctcac ctaccagcaa aaatccaaaa ggttgacaac agattccatg 300
ggtgatgttc tagggaaaca ggcactttca catactgctt gcat 344

<210> 1844
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1844
tcaccatgtt ggccgggctc gtcttgaact cctgacctca agtgatctgc ctgcctcagc 60
ctcccaaagt gctggaatta cagggatgag ccaccaccct cagcctgact ttggcccctt 120
ttaatagtaa aacaataggt tttctggaaa ctctgaaaca gacttctggt tatatatcat 180
tggctataat catgtcaact atgaccaccc ccaactttat gtttgattta cggcacattg 240
gccaaaataa ctgaacataa tcgcgttaca tttaaaaaga accacgggtg gcactggcgg 300
gtcttagttg taatcccaac cctttgggag gacaaaaccc atgggtcact tggggccagt 360

<210> 1845
<211> 359
<212> DNA
<213> Homo sapiens

<400> 1845
ttgcaggcag actgtagccc catttttagt cctgtttgtt tgacttaagg ttcagtgagt 60
cttgtgtaac agttgtcctt cttgtcagct gtctttcaac tgtgccgttg actgttgtct 120
ggttgtggga ttagtgccat catgaagact ggctaatgtg tttgcatgta gtgcctcatt 180
cctgctacag gaggaggtca gaaaggtaaa accaggccag gtgtggtggc tcacgcctat 240
aaccccaaca ctttgggagg ctgaggcagg agaatcactt gaggtcgggt ttgagatcac 300
cctgggcaac atagtgagac cttgtcttac ctcccaccaa aaataggtga gagtgcgct 359

<210> 1846
<211> 357
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 1846
ctacggctgc cagaagacga ctgaagggca gctaacatca tacttagtgg tgagaaactg 60
cctttcttct aagacagaga ataaggcaaa gataacccct ctcaccactc ctattcagca 120
ctgtactgga agctctagtt gccgccctaa gacacgataa ggaaccaaaa gatgtacaga 180
ttgcgaagga agaaataaaa ctgtctttgt ttgcagatga catgactgtc taaagaaccc 240
tgaaacaatg aagtgactat agcaaagtta caggatacaa ggttattata cacagccaat 300
tggattccaa aatgccagcc accaccagcc agaatttata atcaaaaaga tactatn 357

<210> 1847
<211> 162
<212> DNA
<213> Homo sapiens

<400> 1847
taccgctccc agaagtcgac cgaagggtgt ggatgtttgt agggatgtat atttggtatt 60

gtggcaaggt acacataaca ttaaatatgc tatctgaaac tgtgtaagcg tatagttcag 120
tagcatcaag tacattcgtt ctgttgtgca atcataacca cc 162

<210> 1848
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1848
gcccaggtgg agtacaatca gcgcataagt ctcctgaatg aggggcaaaa ggagagactt 60
cgggagcagg aggagaggct tcaggagcag caggagaggc ttcgggagca ggaggagagg 120
cttcagcagc tggccgagcc acagaacagc ttctaggagc tggtgcgttg ccccagctgg 180
ggagcctgcc ctcctcccta gccctccagg cctttgtttc cccacctata aaatgtggca 240
gagtagccct caagtgaaat gttactccta aaggcacctg tgagccagag acctgctctg 300
gtggctgtgg gagacagggg aagactttcc taacctg 337

<210> 1849
<211> 354
<212> DNA
<213> Homo sapiens

<400> 1849
ggttcttaga atgtatcccc catggataaa gggggactac tgcacttgtt cttttgcagt 60
cattcacaga catgcacaga gtggcaaaaa atttaaatca ccctacatgt actttctggg 120
tgaggtcaaa gtttcactct gtcttctcat ttcagctctt atgctataaa caagtatcct 180
tttccacagt ctatttagag tcatttttt ttttgcattt ttgcgctttt tgtggggaat 240
tttgctgttt aaaaaggccc ctaaccataa tgttcagttg ttacctaggg tccctaaagg 300
caagaaagct atgaagggcc ttactgagaa aatacctatg gaaaaagagg ttct 354

<210> 1850
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1850
gctgggatta caggcatgag ccaccgcacc cggctgcttc caaattaatt tttgattatg 60
atcaaaagat tccaaagaat cgcttaagca taggagttca agaggctgca gtgggccaag 120
atcacaccac tgcactccag cctggggaca gagcaatacc ctgtctctaa aaaacaagaa 180
gattcctaca gagcatgaag tcaagcaagc ataacaaatt ggagaagctc aataacagca 240
aagtggggcc agccatccat atacattcat ttgctatgag gatgtctcag ccatagggac 300
cagacacacg agtcttccaa cagg 324

<210> 1851
<211> 364
<212> DNA
<213> Homo sapiens

<400> 1851
gggggccttc actccctgga gttccaaccg cagccatcct tgtccccaca acttctgcag 60
tgtcccaggg cttgcctcac tctaactcag cccactcaca cttatcacgt gacttcatcc 120
taaacaacaa taaccttgaa atctggaatc tgtcttggtc atgttcttac aaactcatgc 180
tgaaataaat gacagcagcc caggctggct gcagaggctc acacctgtaa tcccagcact 240
ttgagaggcc aaggcaggag gagttcaaga acaccctatg cgagatccca tctctacaaa 300
aataaaaaat tagctggggc cgggcgcagt ggctcaggcc tgcaatccca agcactttgg 360
gagg 364

<210> 1852

<211> 324
<212> DNA
<213> Homo sapiens

<400> 1852
tattcccatt ttacagataa gaatcctgag gcttagagag ttcaagtgac ctacccaagg 60
gcacatcact gataaagggc agaggtggga ttcaaaccca catctgtcag gtgcaagtgc 120
aaggctcctt ctcctcatgc tcactgcctg ctggggaata gggcactggg gacatacccc 180
agggagccct tectcatgtt ctgagtccca gttcatccca tgctgctatt ttgctctccc 240
aggagcatct ggactcccta gacagagccc cagcttctca cctgtccctc tctaaatgct 300
gctctgcagg cctgtgatcc tgga 324

<210> 1853
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1853
ctaccctgcc ctgtctctaa acttttatta ttatccctac agaattgcat tcaaccttcg 60
ctcaaggccg ggtgtggtgg atcacacctg tgatttcaac actctgtgag cctgaggcgg 120
aaggattgcc tgatgtcctg attctcactg tctgctggac aatatagcaa tactccctgt 180
gtcccagaag ccctcctca tgatctgagt ccccgttcat cccatgcttt tattttgctc 240
tgccgggagc atctcgactg cctaaacaga gcccccaact tctcacctgt ccctctctaa 300
atgctgctct gcaagcctga gatcctgg 328

<210> 1854
<211> 375
<212> DNA
<213> Homo sapiens

<400> 1854
gcttggctcc ctgcatcctc cacctcccgg gttcaagcag atctctgcct cagcctcccg 60
aatagctggg attacaggcg cctgccaccg tgcctggcta atttttttgta ttttttgtag 120
agacaggctt tcaccctctt ggccaggctg gttttgaact cctgacctca taatacaccc 180
accttggtcc tccatagagc tgggaagaca ggcgtgcacc actgcactct gccaaaaaat 240
attcacttat cagcgcctaa tgccatgcgg ctgttaatcc agctattctt gaggatttag 300
tacccggatt gcattgagcc caccgggttt agagctgatt aaccttgaca taatatcatg 360
gctctctaag ggggg 375

<210> 1855
<211> 346
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(346)
<223> n = A,T,C or G

<400> 1855
cccaaagtgc tgagattaca agcgtgagcc actgtgcctg gccttttttg ttttgatctt 60
tgtttttgtg agaccctctc agtccgttac ccaggctgga gtgcagaggc acaaccatga 120
ccatagctta cctatgggct cctaagctca agagatgctc ctgccttagc cacctaccca 180
ccaagtggct gggactacag gcatgcgcca ccactcctgg ataattttag catttttttg 240
tggaaaagga gctgcatggt caggagcata ggctaaggcc tggcacccca acgctttgga 300
aggccaaggc agatagatca cctgaggtca ttagatgaag accaan 346

<210> 1856
<211> 343
<212> DNA
<213> Homo sapiens

<400> 1856
tgacagaagg gtaactgatt actgctcagc aaaaaatgat gcagaccaaa agacaataag 60
aagaaatctt taaaatactg taagaaaatt actgttcacc tagaatttta tacccagtta 120
atatatcctt caaaactgaa tgcaaaatag agatgtattc agacaaaaac caagaaaact 180
ttgcactagc agaccaaaca tgcacagaat gagaaactaa aggaaattct tcaagtagaa 240
tgaaaataat gccaggtaaa acatgaaaat acaaaaggaa atgaacagtg acaaggataa 300
atgaatactg agtttacaaa cagtgaatgt aatgtcctgt ggg 343

<210> 1857
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1857
aaggaacaaa agatatacaa gacaacagga aaacaacaaa atggtggatg ttaagtcctc 60
acttatcaat aataaccttg gctgtaaaca gactaaattc ccaactgaaa agatatagac 120
tagctgaatg aattaaaaaa aaaaaaaaac ctaggtatat gctgcctaaa aaaaactctt 180
ttcccctaaa aagacccttt tgaaataaaa ataggggagg gaaaaaaaat ccttccaatg 240
ggaacccaaa agcaggggaa aatagctttc cttatttcag gtaaagcaaa ctttaaacca 300
aaaagaaaca gggtttttt catttcccca gaaaaatgta ccattggtaa acatc 355

<210> 1858
<211> 315
<212> DNA
<213> Homo sapiens

<400> 1858
ctgtaggaca atttaaaaag gtaaaatgta tgcataatag gaatccaaga cagaaaagaa 60
agagagaagg aaacagaata cagatgctcc tccacttaag tcctagtaag tccatcctga 120
gtgaaaatac tgtcaggcaa aaaggcatag ctgactggaa gctgaggctt gctgctgccc 180
agcatagcaa gagaagtatg gtttctactg aatgcatatt gcttttgcac cattgtaaag 240
ctgaaaaatc attaaaatag tagtcgaaga aaaaatggct gaaaactttt caacatttac 300
gacagacacc aaatg 315

<210> 1859
<211> 310
<212> DNA
<213> Homo sapiens

<400> 1859
tttttaagtg tacgatgaaa ttcacctgtg aagctacatt tgtctagagt tttctctggg 60
gagaagtttt taaattatcg ctcagtttcg tatatagaat tctctctaat tttatttcct 120
tagcctgttt tggtaggtta ttgttttccc agcatttgtc catttaatct aagtttgcga 180
atgtcttggc atcagattat tcacaatatc actttaccat tctaatgtct acaggggcat 240
tccctttta ttccttacat tattttcttg gtgccttctc cctttgtttc ttttgattag 300
tctcaccagg 310

<210> 1860
<211> 400
<212> DNA
<213> Homo sapiens

<400> 1860
cgttgctgtc gaacaactgc ctcaggatat actcttttta atcagtattg taactaacct 60
tggcttattt tacttttaga cttggggttc tattttgctt taaaacatgt acatcagttt 120
tgtttttttgt tttgatcttt tctttccttt ttttttttttt ttttaaaaaa aagggatttc 180
cctttgcccc cccatttttt aaaagtgcgg ggggccccaa ttttgcccta actgcagcct 240
tgacctttaa gcctaaggga accctccccc ctcaccctcc aatatagggg ggactatagg 300
acccccccccc cacccgggggt aaattttggt ttttcctgaa aaaccaaagt ttccccttgt 360
ggtgaagctg ggattgaacc cccggggaca aaccacccccg 400

<210> 1861
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1861
attccctatt agtatgacat ttacttttgg ttattagtag gtagtcatta acatgtttaa 60
gagtttccgc tattcctgtt ttatagtgtt attgctagaa gtggttcctg aattttataa 120
aatgcctttt cagcatctat tgataaaatt gtatgatttt ttttctcttt aatttgttga 180
tgtaatgaat tagaatggta ggcatttgat gtggaaccaa acttgtattt ctggaacaaa 240
tactacttgg tcattgtgaa ataatgattt gctacatgag tggattttat ttaccagtat 300
ttaatttaga attattgcat tctcattcca aagtacaatt ggattttggc cctctgatgc 360

<210> 1862
<211> 366
<212> DNA
<213> Homo sapiens

<400> 1862
cacatacgca tacctaacac atgtgcacac acgatcctgt ccccatcttc ctctccctgg 60
atcctccgag catgcacact gacacagttg cacacatgca tgattgtgca tacacacacg 120
tattcacagg cacacatcca tacacaccta caagcacaga agcatgcaca caccacatgc 180
atgcatactc acacaaaagt gcacgcatgc atataccact tatatacaca ggcacacacc 240
cgtacacacc cacatgcaca catgctcgta cacaagtgca cacatgcata tgccatacaa 300
ttgtgcgtgc acacacacac atatatatac gaatatccca tgcatccaca tgcacacatg 360
ggtacg 366

<210> 1863
<211> 394
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(394)
<223> n = A,T,C or G

<400> 1863
ggcacgaggg cagtacatgt acgatgatta ggttgcagaa tacatcgatt gcatcagcaa 60
tgtggcgcac gttgggcact gccaccctct cgtggtccaa gcagcacatg agcagaacca 120
ggtgctcaac accaacagcc ggtacctgca tgacaacatc gtggactatg cgcagaggct 180
gtcagagacc ctgccggagc agctctgtgt gttctatttc ctgaattctg ggtcagaagc 240
caatgacctg gccctgaggc tggctcgcca ctacacggga caccaggacg tggtggtatt 300
agatcatgcg tatcacggcc acctgagctc cctgattgac atcagtccct acaagttccg 360
caacctggat ggccagaagg agtgggtnca cggg 394

<210> 1864
<211> 235

<212> DNA
<213> Homo sapiens

<400> 1864
agatggagag ggaaagcatt tggaagacag aaactgaata cacaaattgc aaatatttga 60
aatgaacaag aggtcatttc ctacaaatta taaatgttaa aatgataagg gactattatg 120
agcaaccata tgccaataaa tttgtcaatt tagctgtaat agaatatttg gccgggcgcg 180
gtggctcacg cctgtaatcc cagcactttg ggaggccgag gcgggcggat cacgg 235

<210> 1865
<211> 235
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(235)
<223> n = A,T,C or G

<400> 1865
acgacagaag ggaccgcgcc cggccgagag ttgactcttc agattcacaa ggtccacaga 60
gaaacactca gaggaaaaat caaaccaaac ctnnnaaaaa aaaaaaaaaa aaaaaaaggg 120
gggggggttt ttttcggaaa ccccaactgg gaaaaaacct ttgggggttt ggggccaccc 180
ccccttgggg gggggggaaa aaaaggtttt ttttgggaaa tttgggggggc ttttt 235

<210> 1866
<211> 320
<212> DNA
<213> Homo sapiens

<400> 1866
cggggattat aatattcaat caacgttatg aatgaaaagt gtattttgcc ttatactttc 60
aacacacaac ttactaacct aatatattca cttattaatc agataatttt gtgttaaaac 120
ttacaactct tattttcatt ggactttgat tgattaatta tacatttgac aaattaaaat 180
ctcaaacatt tatgcactgt tcacaaactt aaactgtctt aaacatataa agacacaaaa 240
cttatatatc tagcaaattt aattctctga aatttttgtt ttgttttgtt gagacagggt 300
cttgctttgt cacccaggcg 320

<210> 1867
<211> 229
<212> DNA
<213> Homo sapiens

<400> 1867
tacggccttt gcattttctg ttttctctgc ctggacgtgc tgtgcgccca tatactcact 60
tggcttaccc tcttgcctcc ttcaggtcac tgctcaagtg tcttcttacc agagatgcct 120
tccttgacta ctgtctataa aatagtaaat gcggccgggc gcggtggctc acgcctgtag 180
tcccagcact ttgggaggcc aaggcgggtg gatcacgagg tcaggaaat 229

<210> 1868
<211> 417
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(417)

<223> n = A,T,C or G

<400> 1868
gcctacggct ttcgttaaaa cgacacaaag ggcgggatct cggctcactg caagctccgc 60
ctcccgggtt cacgccattc tactgcctca gcctcccaag tagctgggac tacaggcgcc 120
cgccactacg cccggctaat tttttgtatt tttagtagag acggggtttc accgttttag 180
ccgggatggt ctcgatctcc tgacctcgtg atccgcccgc ctcggcctcc caaagagctg 240
ggattacagg cgtgagccac cacgcccggc cggagtaatt ttacaaaaga gacttgttag 300
taactacctc atccaggtta tcaaattaac atcaacagtg attaaagcca ggtgataccc 360
tgtgcccggg atattatgtg atgagaatgg cacatttcct ttgagatctt cctcccn 417

<210> 1869
<211> 342
<212> DNA
<213> Homo sapiens

<400> 1869
ggctaacttt tttgtatttt tagtagagat ggggtttcac tgtgttagcc aggatggtct 60
cgatctcctg accttgtgat ccacctgcct cggcctccca aagtgctggg attacaggca 120
tgagccacca cacccgacct cccttacatt cttaaaaatt atggagaacc ccaaagacct 180
ttgctttatg tgggttctat ctattaatat ttaccaaatt aatattaaag ccgagagaaa 240
tttaagtatt ttcttactaa tttttaaaca ataaatttta atataatgaa ccctttacaa 300
gctaaagtaa gacggagtct cgctctgtcg cccaagctgg aa 342

<210> 1870
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1870
aatcttggct cactgaaagc tctgtcctct gggttcaagt gattcacatg cctcaacccc 60
ccgcgccctg cctcaaggta gctgggatta cgggcgccca acaccacacc cagctaattt 120
ttgtattttt agtacagatg aggtctcacc atgtcggtca tgctggtact aaactcctga 180
actcatgcgt ggaaactaat ttaactttcc tcctggatga cctttgggtt tactaattat 240
attagcggca tcatcacaaa gctgtttttа tctttatgaa aattttagac accatgtttc 300
tttaaactcc ttctacattg gaggcatgag gatacaatta tccaaaaaat ggt 353

<210> 1871
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1871
cgttgctgtc gttcaggggg aaattgaaag atatatattt tagtcgattt ttcaaaaggg 60
gaaaaaagtc caggtcagca taagtcattt tgtgtatttc actgaagtta taaggctttt 120
ataaatgttc tttgaagggg aaaaggcaca agccaatttt tcctatgatc aaaaaattct 180
ttctttcctc tgagtgagag ttatctatat ctgaggctaa agtttacctt gctttaataa 240
ataatttgcc acatcattgc agaagaggta tcctcatgct ggggttaata gaatatgtca 300
gtttatcact tgtcgcttat ttagctttaa aataaaaatt aataggcaaa gcaatggaat 360
atttgcagtt tcacctaaag aacagcataa cgaagcggga aa 402

<210> 1872
<211> 324
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(324)
<223> n = A,T,C or G

<400> 1872
gaagagagag aagagaatga gagagagaca gagaaggaga aagaaagaga ataaggggga 60
gacagagaca gagagaggaa gaaagacaga gaaggaggaa gagagaggaa gagaggcggg 120
aaggggggag agagaagaag agaatgagag agagacagag agggaagaag gaagagaggg 180
aggaagagag aggaagagag gcaggaagag ggggagagag aacaccgatg aaganaggaa 240
taaaggaata gaggaaggga gaaagaaaga tctaggaaga gagagggagg aagactgaca 300
atatgacagc atgggcaaga gagt 324

<210> 1873
<211> 306
<212> DNA
<213> Homo sapiens

<400> 1873
cgcccagcta gtttttttatg tttagtagag acagggtttc gccatgctgc ccagggtggg 60
atcaaactcc tgagctcagg caatccacct gccttggcct ccccatagtg ctaggattgc 120
aggcatgagc tactgtgccc agcctactgc tctttcttct gtttacagag gaactgcagg 180
tgctagggat acctggatga atgaaataca gccctgcccc acagtatttt gtggtctggt 240
ggcaatgacc gacctgttac agaggcactt taatagagac tgctatgtgt caaagcacag 300
ctgtgg 306

<210> 1874
<211> 282
<212> DNA
<213> Homo sapiens

<400> 1874
ggaatagctt cctatacccc caaagtccta ttcaggtctt ggggtacaca ctgcccagtg 60
ggcctctttc ttatcatctc agttagaatc cttttctccc tctatatatt ttgcaacttt 120
aacagttcag ttttttggca atatattgaa catatttaaa gtatacaaat ttatcagttt 180
tgatatctgt aaacatccca tgaaactatc actacaatca agaaaaacat attcttagcc 240
aggtgtggta gctcacacag gtaatcccaa cactttatga gg 282

<210> 1875
<211> 305
<212> DNA
<213> Homo sapiens

<400> 1875
gatgctatgt aagacaacca ttgcagagac acaaagtaat cagattcttg aaggtcaatg 60
caaaagaaaa aaatattaaa ggcagttaac gacaaggggc aggtcacata aagtggaaac 120
tacatcaaac tcacagggga actctcagca atatcccaca gtcagaagac attaagaatc 180
catattcagc atttttgaaa aaataaaatt ttgaaccaag aattttatgt cccaccaaac 240
taagcttcat aaacaaggga gaaataaaat ccatttcaga taagcaaaag ctaggggaat 300
ttatg 305

<210> 1876
<211> 365
<212> DNA
<213> Homo sapiens

<400> 1876
ttgaaaggat aaacaaaact gataaactgc tagtctaatc aagaaaaaaa aactccaata 60

aataaaatag acaacaataa agttacactg caacttatac aactgaaata cagaagatca 120
taagggatta ttatgagcaa ctatatacta acaaactgga aacctagaag aaatagataa 180
attcctggat acatacaatc taccaagatt gaatcaggat gaaacagtaa atctgaaaag 240
accaataaag agcagtaaga ctgaataagt aataaaacat ctgccaacaa agaaaagttg 300
aggacttaat ggctccactg ccaaattcta tcaaatgggt aaagaactaa cccatatttc 360
cctaa 365

<210> 1877
<211> 146
<212> DNA
<213> Homo sapiens

<400> 1877
tgtcgcctgg gagacgacga ccgatggggc tttgttgttg agacaggggt tctcattgcc 60
ctgggtgggc tacatctcct gatctctagc tacccacctg ccttgggctc cccaagggct 120
ggggattccc gattgaggcc caccgg 146

<210> 1878
<211> 329
<212> DNA
<213> Homo sapiens

<400> 1878
cagtctctac taaaagacag aaacaataca ctgccaaaat gttaagttga ccaccgtgaa 60
acttctctat tggagtgtct gtttctttaa gctgtgaata ctgaaattat gccttgtctc 120
ctccccaccc caggggggatg ccgttttgca gtgtggacac gtgtttgaag cagttactaa 180
actcgtcatc ctggttaaga aggagaacat tgtcaatgtt gttcaaggaa ggtaggtggc 240
ttcatcttca gctcaagaag taattcaatg ttaaaattgt tattaaggcc gaacgtggtg 300
gctcatgcct ataatcccag gactttggg 329

<210> 1879
<211> 406
<212> DNA
<213> Homo sapiens

<400> 1879
cgttgctgtc ggaaggagag aagcgatatc ttgatacatc ctatgggtat taaaaagcca 60
atagaatatt atgaataatt ttatgctaat aaatttaaca acttcaacat cataaacaaa 120
ttccttgaaa aataaaaagt accaaaattc attcaagaag aaatagatac cagcctgagc 180
aacatggcaa aatcccatct ctacaaaaca tcaaaaaaaa aaaaaattag tgggccgggg 240
gggggcaccc ctgaaatccc actttgtctg gaggttaaag gggaaggata acttgacccc 300
agggggggtaa gggatgcggg ggcccttggt ctccccctgg cctttttaccc tgggggaaaa 360
aaaagaaacc cccgctcaaa aaaaaaaaaa aagtgaataa tttgga 406

<210> 1880
<211> 405
<212> DNA
<213> Homo sapiens

<400> 1880
gatcccatcg attcgcattc cgttgctgtc ggagctcctt atctgtctga gaatggggac 60
cagctctgag tggggttgct gcctgtattc cctgtttctc aggaacttac atgggtctgg 120
ggaggctagg taggtgattg tacgtggttg ctcttctcct tggctggggg aggtaatgag 180
cagatctctg tgggtgtgga gcttgttggg gggatgtcta ggaagcttca gcttagccac 240
attcccaagt ttaggtgcac tgagccatat agcccagtgt atgcatgtgt gggtgtgttc 300
atgcacacac acactctctc tcttgtctct ctgtctctct ctcactctta ctttcttact 360
ctcttctcag gtcacttgta cacttggttt cctagtagaa gctca 405

<210> 1881
<211> 348
<212> DNA
<213> Homo sapiens

<400> 1881
aggtgatcca cccacctcag cctcccaaag tgctagaatt acaggcctga gccaccatgc 60
ctggcaattt ggtttctttc aaaatagagc ctgagataag aattttgggt gcaggtagtt 120
tatttgggag gtgatcccag gaagcagaag tgagcagaca gagagaatga gataaggaag 180
gaacaacagc agtataagaa tgctttctag aggattcttc tgagggcact gtgagttaaa 240
ttctgccata atctcttaag aaccacagag aggccaggcg tggtggctca ctcctgtaat 300
cccagcactt tgggaggccg aggcaggcgg atcacgaggt caggagag 348

<210> 1882
<211> 378
<212> DNA
<213> Homo sapiens

<400> 1882
tactgctttt agaaaacgac agaaaggtcc actaagggcg ggatccatcc actaaccaac 60
ccacccatcc attcatcaat tgtccatcta ctacttcatc caccaatctc tccatccatc 120
cgtcttccat ccattcacct acctatttat caatctatga accagctcat ctaccactct 180
ctccaccagc ctaccagata ttaacatatt aactaatcca tccaaccatc tatacttcca 240
tcattcatcc accaacccat ccataatcct tccatccatc caccatctat acatttccag 300
ccacttaacc accaatgaac ccattcacta atccattaaa ctattcatct atgtatccct 360
ccaccaaccc acccatcc 378

<210> 1883
<211> 341
<212> DNA
<213> Homo sapiens

<400> 1883
agactcccaa gtagctggga ctacaggcac agtcaccatg cccggctaat ttttgtattt 60
ttagtagaga cagagtttca ccatgttggc caggctggtc tcttgacctc gtgatccgcc 120
agcctcagcc tcccaaagtg ctgggattac aggcgtgagc caccgctcct ggcctattgg 180
tattttgggg ggccaaggct tgtttttgtg cccaagctgg agtggagtgc gacactctgt 240
gctcactgca gcttccgccc actgtgttta agatggacct tgcgcctcac cctgcccagt 300
aactggagac tatttttgca ttgcaagcga gaccactgta t 341

<210> 1884
<211> 358
<212> DNA
<213> Homo sapiens

<400> 1884
cacatacaca tacctcacac atgtgcacac acgaccctgt ccccatcttc ctctccctgg 60
ttccccccgtg catgcacact gacacagttg cacacatgca tgattgtgca tacacacacg 120
tatccacagg cacacatcca tacacaccta caagcacaga agcatgcaca caccacatgc 180
atgcatactc acacaaaagt gcacgcatgc atataccact tatatacaca ggcacacacc 240
cgtacacacc cacatgcaca catgctcgta cacaagtgca cacatgcata tgccatacaa 300
ttgtgcgtgc acacacacac atatatatac aaatatccca tgcatccaca tgcacaca 358

<210> 1885
<211> 138
<212> DNA

<213> Homo sapiens

<400> 1885
ctgactggaa ttaattaaac taacctttct ttgccttact acgtgcttac cacagtgaaa 60
gtaccctccc tagccaggcg gggtgactta tgcttataat cccatcactt tgactgactg 120
aggcaggtga atcacctg 138

<210> 1886
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1886
agttgtttct tttatcaaag agaggtgcta gaggcctctg caaaaaaatt ttcatttatg 60
tctcacatgg ccacaccttg gtatagagaa aactgggaaa gccaatccag tacttagctt 120
tccaggctct atgatggcaa ttgtcaagga gagggttaga aatgtgtgtt ggggcaggac 180
acggtggctc atgtctgtaa tcccagcgct ttgggaggcc aaggcaggtg ggtcacctga 240
ggggaggagg gtctcaatct cttgacccta tgatctgaca ccttcggtct cccaaagagc 300
taggactacg ggcatgg 317

<210> 1887
<211> 81
<212> DNA
<213> Homo sapiens

<400> 1887
acgacagaag ggtgcggctg ctagaatacg accgaggggt catcttttaa tagcaagaat 60
catatttttt ttccagtacc c 81

<210> 1888
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1888
gagcaagact ccatctcata gggaaaaaaa aaaaaaaaaa gccgggcccg gggacttaaa 60
ccttgaatcc caggcttttg ggagggccgg gggggggtta caaaaggcca ggaattcaaa 120
acccccccgg ttttagggga accccccttt tttaaaaaaa aacaaaaatt aattgggggg 180
gggggggggc ccctggaaac ccaatttctt gggggggtgg gggcaaaaaa atctttaaac 240
cccaggggag ggggttccaa gagcccaaaa ttccccccat tgtccccaat tgggggggaaa 300
aaacaaaaat tttttttaaa aaaaaaaaaa aaaaaaaacc gggggggggg cggtttaaca 360
aaaaaagaaa attccccacg gcccgg 386

<210> 1889
<211> 122
<212> DNA
<213> Homo sapiens

<400> 1889
atcaactgct atgacggttc acaatgtcag tataccagaa ggaatagaaa actgatactg 60
ttttaaataa tctgtcattg taccttttt tttttgctga actacattct atgggacgtg 120
gg 122

<210> 1890
<211> 383
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

<400> 1890
cgttgctgtc gaaggagaag aagatgatga tgatgatgaa gaggaggaag gattagaaga 60
tattgacgaa gaaggggatg aggatgaagg tgaagaagat gaagatgatg atgaagggga 120
ggaaggagag gaggatgaag gagaagatga ctaaatanaa cactgatgga ttccaacctt 180
ccttttttta aattttctcc agtccctggg agcaagttgc agtcttttt ttttttcccc 240
ccttggcccc ccccccccct gttttggggg ccttttttct ttcccccggg ctccccattt 300
tttgggggggg aaactccttg ggccccaccc cctggggaaa aaaccctccc ccctttttgg 360
tcagacccca tctttttccc ccn 383

<210> 1891
<211> 335
<212> DNA
<213> Homo sapiens

<400> 1891
ggagatgctt ttccttctgc atgttaactc acaactcatt cctaatcatg gtggctctaa 60
tccaactgac taaaatgctt ttctccccaa ggaactaacg tagttacttg agagaagagt 120
ttaatccagc ttctcctgcg tggcaaaggg ttttttttca tcagagggta gctgacttca 180
ataagggcat ttacaacatc ccaagggctt attttcattt aagaaatttg gccgggcgcg 240
gtggctcacg cctgtaatcc cagcactttg ggaggccgag gcgggtggat catgaggtca 300
ggtgatcgag accatcctgg ctaacaaggt gaaat 335

<210> 1892
<211> 337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(337)
<223> n = A,T,C or G

<400> 1892
cggggacggc tccgagaaga ctacagatgg gaatagtatt ggtaaaaccg tgataaaatc 60
aaattgtttt ctgatagaat atcactttac catgtaatca atttatgaat cttctcccta 120
caacactatt taataattac tcttataaaa atatgctttg aagtatccaa acctaaagtt 180
aaaatgagtc atggaattgt aatggcaata gaaaaattac aatcacatta tcagcaaaag 240
ctgacagttt gactccctct ttaccaatct ggatgtccag acagtaactg ctgtcttcaa 300
gagactcacc taacacataa ggaatcacat aaacttn 337

<210> 1893
<211> 312
<212> DNA
<213> Homo sapiens

<400> 1893
gaaactgagt ctcagagaga caaggtaact ggctaataag ttcgaacact gtttttccca 60
agactatttg actcaaaata cagaggaact ttggtgtgtg tgtgtgtgtg tgtgtgtgtg 120
tgtgtgtgtg cgcgctttca tatttactat atagtagagc tctttaaata actctctgag 180
acagaatgaa aatatacacg tgttggggtg cgcgcagtgg ctcacgcaat tctccctct 240
ctgtgggagg ccacgctggg tggatcacct ggggccgaga gtgagacacc actctggccc 300

gtggggagac ct 312

<210> 1894
<211> 325
<212> DNA
<213> Homo sapiens

<400> 1894
aatgtaaaac ataaaaatat aaaacttcca gaaaacggca caagagaaaa tctagatgaa 60
tttggatttg tcaatgactt tttagatatg gcatcaaagg caagatctag gaaataaaaa 120
gttaataaaa tggactttgt taaaataaaa actatatgct acatgataga cgtctagcga 180
atgaatagac aaacacgggc tgagagaaaa tatttgtaaa agatctactt gataaaggac 240
tgttatgcaa gtatataaag aaccctaaaa tctcaacagc aaaaaaaaat ctgattagaa 300
attgtgtcag agactttcac aaacg 325

<210> 1895
<211> 394
<212> DNA
<213> Homo sapiens

<400> 1895
cgttgctgtc gggcaaaact caacagcccc tggagctgcg cttgtggtgg agctggaccc 60
tgattttagc tggaccttgt ttttagagac agggtttcct tctgcagtct caatctccta 120
gccttgattg atcctcctgc cttggcctcc caaagtgctg ggactacagg tgcatgcaac 180
cacacctggc taatttttct ctcttctttc ttttcttttt ttttttttgg agggaaactt 240
gtttgggggc ccaagtgggg agaaaagggg gccattctgg tttattggaa ccttggcccc 300
cgggggtaaa acaatttttc gggctaaacc ccccaaggag gtgggaaaaa gggggggccc 360
cacccgcccg ggataatttt tgaattttaa agag 394

<210> 1896
<211> 340
<212> DNA
<213> Homo sapiens

<400> 1896
cagaccattc gtgacatgct tggacttttt ggtttgttct gaacatcttt ctttcttata 60
caaccactca ttttattctt ggtctaaatt taccatacaa gattattttt catacaaaat 120
tatttctcat ttgggcatag tggctcatgc ctgtaatccc agcactttgg gaggtcaagg 180
ctagtatgtc acctcaggtc aggagttcga gaccagcctg gccaacatgg caaaacccca 240
tctctacttt aaatacaaaa attagccggg catggtggca ggcacctatt attccagcta 300
ctcaggaggc tgaggcagga taatcacttg aaccctgctg 340

<210> 1897
<211> 321
<212> DNA
<213> Homo sapiens

<400> 1897
tcctcacctt tgagacttca aagataggac agatgtagga acaaaacggc tgattagaag 60
cagctgcagt ccgcagcact cacaaagaga aatgaaaagg ggtgagtgaa ttcagcacct 120
tcaatggaaa tatccatgtt cttgcattgg gaataactag gtgaacaact tgacccatgg 180
aaaataaaga aaaggagggg ggtgacaaac cacccaggag tggcacagag cccaaggaac 240
caccacccca agccaaggga agtggtgagt gatagtgtga ccccactctg ttaccaatga 300
acaagctaac ctcatgatga g 321

<210> 1898
<211> 129

<212> DNA
<213> Homo sapiens

<400> 1898
gaaagttcag catcacttat tatttggcag tgcctctcat gcaatttaac acatcaaata 60
aggctaatta gtttaacttt cctcttggta ccaggagaaa aaattaattc ttttgaccta 120
tttcatggg 129

<210> 1899
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1899
ccagtggtga atgagacaga cctattcctc acctttgaga cttcaaagat aggccagatg 60
taggaacaaa acggctgatt agaagcagct gcagtccgca gcactcacaa agagaaatga 120
aaaggggtga gtgaattcag caccttcaat ggaaatatcc atgttcttgc attgggaata 180
actaggtgaa caacttgacc catggaaaat aaagaaaagg agggggggtga caaaccaccc 240
aggagtggca cagagcccaa ggaaccacca ccccaagcca agggaagtgg tgagtgatag 300
tgtgacccca ctctgttaca aagtaacaag ctaacctcat gatgacagga g 351

<210> 1900
<211> 138
<212> DNA
<213> Homo sapiens

<400> 1900
ggaagattta gcatttttt tcattgccct ctcagtacct aattctgtaa atagaagttt 60
tttcctgtat tttcttctaa gagttttata gttttagctc ttaatgttta ggtgtttgat 120
cctcaaaagg tatttatt 138

<210> 1901
<211> 334
<212> DNA
<213> Homo sapiens

<400> 1901
tatgcataag acaaccatgg tgcactgcag ccactaactc ctggcctcaa gtgatcctca 60
cacctcagta gtcccatagt tgggactcta gggtgtgcta ccacacacga cttaagattt 120
atatttttaa aaaaactgga ggtataacta tataaagtgc aaaaatctta catatacaac 180
ccaaatttag acacatagaa actatatgaa tatatatgta accattatca atataaaata 240
tttttaaaat aaaattaatt caaaatatta tattctaaca cactgcctta tggttagata 300
ccataaggca tgtaaaaagt tactacagat aaag 334

<210> 1902
<211> 418
<212> DNA
<213> Homo sapiens

<400> 1902
cgttgctgtc gaagaattag aagagaatcc agaaagcaca gtctatgatg attataaatt 60
tgtcaccaag aaagaccttg aaaatttagg gctcacccac ctcattggat ctcctttcct 120
ccgggcatat atgcatgggt ttttcatgga tataagactc tatcacaagg tgaaactgat 180
ggtaaatcca tttgcttatg aagaatatag gaaagataaa atacgacaga aaatagaaga 240
aacacgtgca cagagagtcc agttaaagaa attgccaaaa gttaacaaag agctggcact 300
taaattaatt gaggaagaag aggagaagca gaaatctaca tggaaaaaga aagttaagag 360
tcttcctaat attctcaccg atgatcgatt taaagttatg tttgagaacc ctgacttc 418

<210> 1903
<211> 444
<212> DNA
<213> Homo sapiens

<400> 1903
ggcacgaggc cgcatggctt cggtctcctc tgcgaccttc tcgggccacg gggctcggtc 60
cctactgcag ttcctgcggc tggtagggca gctcaagaga gtcccacgaa ctggctgggt 120
atacagaaat gtccagaggc cggagagcgt ttcagatcac atgtaccgga tggcagttat 180
ggctatggtg atcaaagatg accgtcttaa caaagaccga tgtgtacgcc tagccctggt 240
tcatgatatg gcagaatgca tcgttgggga catagcacca gcagataaca tccccaaaga 300
agaaaaacat aggcgagaag aggaagctat gaagcagata acccagctcc taccagagga 360
cctcagaaag gagctctatg aactttggga agagtacgag acccaatcta gtgcagaagc 420
caaatttgtg aagcagctag accg 444

<210> 1904
<211> 391
<212> DNA
<213> Homo sapiens

<400> 1904
accatgttag gcaggatggt ctcgaactcc tgaccttgtg atccacccac ctcggcctcc 60
caaagtgctg ggattacggg cgtgagccac cgcgcccggc ccctgacttc catccttaac 120
aggagaagct acaaacacac attgtaaaag tgcatgaata taaggagaag tgaggcatgg 180
tggccatctt tgccatctac cacattagta gaagagaaaa aataaaataa aataaaataa 240
taaaaaactt gatggatcct taaactgtaa gaaagaagga ataaatgaac cacagaatga 300
tgaaacaaat agaaaacaaa tagtaatatg gtagatgtca acccacatat atcagtaatt 360
acattaaatg tagatggact aaagtcaaag a 391

<210> 1905
<211> 344
<212> DNA
<213> Homo sapiens

<400> 1905
ctcacgcctg taatcccagc actttgggag gccaaggtgg gcagatcact tgaggtcagg 60
agttgagtcc agcctggcca acatgacgaa accccatctc taccaaaaaa tacaaaaatt 120
agatgggctt ggtggcatgt gccttgtagt ctcacatact tgggaggctg aagtgggaga 180
atcacttgag gccacaggaa gtgggggagt accactgcac tacagcctgg gggacagagt 240
gaaacccaaa aataaataga caatgatgct cagccatgac tgtttcaaca cagacatatt 300
tgctctttaa agaaaaaaac ccttcatgaa tattcatcct tttc 344

<210> 1906
<211> 263
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(263)
<223> n = A,T,C or G

<400> 1906
tcaatatctt tagccattag agaaatacaa attaaatgag atgccattcc acacctacta 60
gaataaatac aattaaaaat actcatcatc ttttgtgttg gtgatgattt agaacaactg 120
taattctcaa atactgatgg taggaaagta aaatgataca gccactctgg gaaaaaaaaa 180

atggactgtt tcttacaaag ttaaatagac ccccatcatt ttacctactt attctactgt 240
tgctctttaa gcagaaaaca gan 263

<210> 1907
<211> 368
<212> DNA
<213> Homo sapiens

<400> 1907
cacttaaaga aatgagaaaa agaattacaa actaagccca aaataagcat ataaaggcaa 60
taataagact agagtagaaa taaataaaat agagaattaa aaaaaaaaaa aaggcaaacc 120
gggaacgggg ggagggggct aatttttgaa ttcccaccat tttgggaggc caaggaaggc 180
ggacaacaag gccaaaaaat caaaaccttc cttgccaaca ggaagaaccc ctttctttat 240
taaaaaaaaa aaaataactt ggccccgggg gggcaggctt gaagggccac ttactcgggg 300
ggctgaaaca gaaaatttgt tggaacccaa aagggggggt tggaggggcc ctaatggggg 360
caatggag 368

<210> 1908
<211> 408
<212> DNA
<213> Homo sapiens

<400> 1908
cgttgctgtc gcctgttcaa cctcagcaag gttatattcc tccaatggca cagccaggac 60
tgccaccagt accaggagca ccaggaatgc ctccaggcat acctccatta atgccaggtg 120
ttcctcctct gatgccagga atgccaccag ttatgccagg catgccacct ggattgcatc 180
atcagagaaa atacacccag tcattttgcg gtgaaaacat aatgatgcca atgggtggaa 240
tgatgccacc tggaccagga ataccacctc tgatgcctgg aatgccacca ggtatgcccc 300
cacctgttcc acgtcctgga attcctccaa tgactcaagc acaggctgtt tcagcgccag 360
gtattcttaa tagaccacct gcaccaacag caactgtacc tgccccac 408

<210> 1909
<211> 311
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(311)
<223> n = A,T,C or G

<400> 1909
caacacgaga agtaatgcag gtactttaag gagctaagag ggaaacagaa atctcagccc 60
tataacaagg aactgtatga gcatagaaac attctcctcc tcccccagta actttatcaa 120
aactcttaaa aatttccccc ctttggcaca aacatatgga caccttctc actccagagt 180
aaaggaatga tgtactaaaa tgaaggattt ataccgggtg gggtggctca tgcctgtaat 240
cactttgaga ggctcaggtg ggcggattgc ttgagctcag gagatcgatc agcctgggca 300
acatggtgaa n 311

<210> 1910
<211> 324
<212> DNA
<213> Homo sapiens

<400> 1910
agataaaaat taaaacataa aattaaaaaa tttttgaaaa cgatgtttc agacatacaa 60
aactgaaagg aatcatcacc agtagacctg cactacaaga actgttaaag gaaattcttc 120

aggcagaaag gtaattgtac caaataaaaa tatgatccca caagagaaag aaagagcatc 180
caaatcggta aagaggaagt catactgtca ctgtttgccg atgatatgat ctttgacaaa 240
gcaaacaaaa acataaagtg gggaaagcac accctattca acaaatggtg ctgggataat 300
tggcaagcca catgtaggag aatg 324

<210> 1911
<211> 364
<212> DNA
<213> Homo sapiens

<400> 1911
gttgatggga atgtgaaata gacatcctat ctaaagggca tcttgagtat atctaaattt 60
aaaacacacg taccgtttga cctaataatc ccacttttt ttttcttttg agactgagtc 120
tcactctgtg gcccaggcta aagggcagca gcttaatctc ggctcactgc aacctctgcc 180
tcctgggatc aagagattct ctgggcctca accttccaag gagctggaat tacagaggcc 240
cgcctcccca cccgactgat ttttggattt ttagtaaaca ccttttggac acctggaaat 300
ccaacgcaaa cgtcatatat ttatatccac tctttcacaa aaacttttct ttctttttg 360
ttgg 364

<210> 1912
<211> 382
<212> DNA
<213> Homo sapiens

<400> 1912
cgttgctgtc ggggcattat aagtaattaa agatgattta agtatatgga aagatgtata 60
taggttatat gcaagtactg tgccatttca tataaagcac ttgaacatca cagattttgg 120
tatcaatgag gggtgctgaa accaattgcc catggatacc aagagacagc tatatttgtt 180
tcaatgtgta cctctccttc taaactcagt tcttaagcat atagtatctt tatagctata 240
cacctagtgt ctatcagacc ctaaactatg gtaggccctc aatacatttt attgttatag 300
gtagatagat aggcatgagt agggcaggag agggctctcc ctccacccac tagaaatgtc 360
aagtgatgtt ttaaaaattg tg 382

<210> 1913
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1913
aaccaatgtt tccaactgca tcctgttata aagagagagc aaattttatt aaacttatgt 60
aaataattct tgccataaaa aataagaata ctcatggata gtttctgaat tttagaggaa 120
tcaaataggg acaaaaaaaa tgtttccacc tttgttcaca aagtatacca aattactgta 180
aactaataag tagcttaaga gaaagaaaag gtttccttaa agctagaaaa caaaatattt 240
aaataaagaa cctggctagg catggtggct catgcctgta atcccagcac tttgggaggc 300
cgaggtgagc aaatcacctg aggtcagggg ttcgagacca gcctggccaa c 351

<210> 1914
<211> 394
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(394)
<223> n = A,T,C or G

<400> 1914

ttttgccttc agaagcttcc ctgaaaatca cgaataggag gcagataaat agtagaaaag 60
gcatacaggt ttctgcaatg tgtgtacacc ggagacgtta gaactaagac ccagacacac 120
gatgcgtgca gaagcttatc taccacatga agtttacaga aagaatgggg tcttggatca 180
cagggaaaaa ataaaggtta tgtgagaaaa cgaccctggc tagcaacagt ggacttattg 240
cataggtgga atctcactag gagcagtcct cagagagaat aaacagaana tgtttctttc 300
agacctttgg agacctcaga ctctcattta agctttccta gatccagaca aaggggcaga 360
cctcagagaa agcctggctg catcaaggca gatn 394

<210> 1915
<211> 369
<212> DNA
<213> Homo sapiens

<400> 1915
tacggctgct agaagactac agaagggtac ggctgctaga agaccacaga agggaatgat 60
attattagat cactgaagca gaaaattagc aaagatattt aggacctgaa atcagcactg 120
aaatcagaca gaaaacactc ctcaacaaat gcaaaaaaaa aaaaaaaacc ggaatttta 180
acacccctt taaaaccaca ccccattcaa tttaaaactc aaaacggaca agccctttaa 240
aaatcttccc tttaaaaaaa tttggaaaaa ctggctcctg aaggacttgg ggaaaatatg 300
gattttaagg caaaatccaa aaatttttt gaatttatta aaaataaggg gccaacttca 360
caaaatttt 369

<210> 1916
<211> 363
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(363)
<223> n = A,T,C or G

<400> 1916
cggttgcata ggcaaaggga gattaaaaaa caatctgctc attgctcctg agctattgga 60
attttctcct taactaaggt atgagctcct ggagctctta aatgtctatg ccaaggtctc 120
aagccagaag ccacagctac aatccggcct ggagataggt gtggntttga cgtgcacact 180
gtacaaacaa aacaatatcc attgtttcaa agatcagatt tcacataaaa atgtggatta 240
tcacaatttc ttttctttgc ttttaacttt tagagacagg cttgatatgt tgctcacgct 300
gatcttgaaa tcctgggctc tagtgatcct tctgctttat cctcccaagc aggtttgttt 360
tac 363

<210> 1917
<211> 311
<212> DNA
<213> Homo sapiens

<400> 1917
atacacatga catttttttt tttttttttt ttttttgggg ggggaatcct ccttttgccc 60
ccaagctgga gggaaagggg cccaattcgg ttaacttcca ggcccccctt ccgggtttaa 120
cacatttttc tggctaaacc ctccaatgga gcggaaataa ggggcccccg caccaacccc 180
aagatatttt ttaaaaattt taaaaaaaaa aggggtttac cccgtttaac ccgggagggt 240
tagactctcg gaaccaggga attacccccc ttggcccccc aaaggggggg gaatcacgga 300
ttagccccct t 311

<210> 1918
<211> 319
<212> DNA

<213> Homo sapiens

<400> 1918
gaagacttac ttaccctaag tatatatgca cccaacattg gagctcccag gtttataaaa 60
caattacttc taaacccagg aagagactta gtcacacaac aacagtgagg aacttcaata 120
ccccactgac agcattagac agatcatcaa gttataaaac taacaaagaa attctggact 180
taaaaattga acacttaacc aataggacct tataaatata ttaagaatat ttcaccccaa 240
caccacagaa tataaaataa tcttatctgc acatgaaaac gactctaaga tcaaccacat 300
aatcattcat aaaaaaggc 319

<210> 1919
<211> 405
<212> DNA
<213> Homo sapiens

<400> 1919
cgttgctgtc ggaacagaat agagagcccc aaaataggct tacatgaata tggcccactc 60
tctctgacaa aagaacatga cagttcaagg gaggaaggat aatcttttca gcaagtggcg 120
ctggaataat gggacatcga catgcaaaaa aaaagaatct agacccatcc ttacccctta 180
acttaaaatg ttaaaataga ttctttttc cttcgaccta gagcccttga caaaatggat 240
cttaaaccta aatgtaaaac ccaaacacta taaaactcct agaagacaac ataggagaac 300
atctaggtga ccttgagttt ggtgatgagg ttttagatac acaaaaagca taatccatga 360
aagaaataaa ttggacttaa atgaatttaa aacttctgga agcag 405

<210> 1920
<211> 366
<212> DNA
<213> Homo sapiens

<400> 1920
gagtgtttgc agagacgtga agccaaaact aatagaactg aggaaaaata gacaaattca 60
caatacagtt ggagccttca gaacttctcc ctcagtaata aatagaagta gacagaaaaa 120
tagcaaggat atagatgaag tgaacatcac catcaaccaa ctgaaatgct atagagcctc 180
acacccccaa acagcacaat acacattctt ttaaaccaca gatggaacat tcaccagcac 240
agaccatatt ctgaatcaga aaacttaaat ttataagaat tgaaagcatg caaagtatga 300
tctgacaata atgaaatcga catagagaaa tgctagggtc tgaggatgtg agaagataca 360
gtctat 366

<210> 1921
<211> 248
<212> DNA
<213> Homo sapiens

<400> 1921
aagataaaat ttgaaatctg gttaggctgg tgttagggtt ctttgttttt ggggtttgga 60
agagatgtgt taaatgttat gtttttaaaa tagtattttt gattattttg tttgcatgtg 120
gttaatttag tttaattttg gtgcggtcct ggcatattgt catttttttc ttatggttct 180
atggaagact tgcccatttt tccaccgttt gttggtaacg ctctggtttg tgttatccta 240
tgattcag 248

<210> 1922
<211> 354
<212> DNA
<213> Homo sapiens

<400> 1922
gtggttgttt aaaagggtat tgtttcattt tcacgtattt gtgaatttgc cagtattcct 60

tctgttatta atttctaggt ttattccatt gtaatcagaa aaatggtttg catgatttcg 120
gctttttaat atgtattaag acttgttttg tagccaacat atggcctatc ctggagaatg 180
tttcatgtat acttgaaaaa aatttgttgt tatacggagt attctgttgg ctctaattgg 240
ccttcaaacc ctttggtttc tgttgataat atatctcagc acactattca taattggaag 300
tggtgtacta aaatctccga ctgtttatcc tatgaaaaag acactttcac atgg 354

<210> 1923
<211> 347
<212> DNA
<213> Homo sapiens

<400> 1923
tgagtagcta caaaagagac cttatggcct gcaaaggcta acatatttac tatctggccc 60
tgtacagaaa aagtttactg gcccctcctc taaggcatga tttattattg gatcgttccc 120
agcatggagc acttcctgcc cttgcctgct tcagctcctc ttcctaacac tgctgtagaa 180
tagaggaaac tgagccatga aaagactatt tcaaagtctc agagagagtg ggattagagt 240
tccatagggc ccctgagtct gtgacattcc cctcaagcct ggggtgagat gctggcgata 300
tccagccctt agagaacaag cggtggaatg gaagggagga aaatcat 347

<210> 1924
<211> 342
<212> DNA
<213> Homo sapiens

<400> 1924
tttgtgagtt tttaatcaaa tatgtatgtc attgttcttc attttattta tgcctaaatg 60
cgtcttgtct tcacacatag aaaatttttgt cattgatttt tttttcactt tagtttagaa 120
gaaataaaat tccttataag aaattgttgg ccaggtgtac tggctcacgc ctgtaatccc 180
agcactttgg gaggctgaga tgggaggatc ctttgaactc aggagttcaa gaccagcctg 240
gataacatag tgagatccct tctctatcaa aaatacaaaa aattatccag gtgtggtggg 300
acgtgcctgt agtcccagct gctcaagagg cggaagtagg ac 342

<210> 1925
<211> 313
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

<400> 1925
aggggctgga ttgattgata tatggaaatg taatcacagt tttccaggaa cccaaatctt 60
tatctccccc aggagcagcg tttcagaatt cacaaataaa gtgcttgagg tgactttata 120
gaacataact attgcatata acaagaccta aatgcattcc tttctaaatg gaaatctaaa 180
cacagagttt gaaaatttag gtaacactaa attccccttt cttgtacttc ataagtaacg 240
aagtatgagg aaattataaa aggtgtaaaa gtgggtttgg cattgtgcta ccaatgctaa 300
tgggaagatg acn 313

<210> 1926
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1926
gtgggcaaaa ggtggtagca tttcccttga gaatcagaag aagacaatga tgcccactct 60

caccactcct gtccaaaata gtattggaac cctagccaaa gaaaccaggt aagagaaaga 120
aataaaaggc atccaaagag aagagaggaa atcaaactat ctctggttgc agatgatatg 180
attctatacc tagaaaatca atcatctctg tctgaaagcc ccttgatctg atttaaaaaa 240
aaaacttcag cagaatttca agatacaaaa ataatgtaca aaatcagtag cattctcata 300
caccaacaac atccaagctg agagtcaaat caataatgta atcccattca caatagccac 360

<210> 1927
<211> 316
<212> DNA
<213> Homo sapiens

<400> 1927
cagcacatga aaggattata caccatgatc aagtagaatt tatctctagg atgcatagat 60
atttcaacat aatcaatcaa tgtgactcac tacattaaca gacaacatga taatcccaat 120
atattcagaa aaagtatttg acaaaatttc acataggctc atggtttaaa aaaaaatcct 180
tcaacaaaat agataaagaa caaacttact gcaacacaat aaagaccact tatgaaaagc 240
tcacagccaa catcataatc agtgaggtaa acgtttttcc tctgagatct agtacaagat 300
gatgttgccc actctc 316

<210> 1928
<211> 361
<212> DNA
<213> Homo sapiens

<400> 1928
gagttggaga agggggagcc ctcatgaact ggctgctatg aatacaaaat gatgcccttg 60
ctgcagaaaa caatttggtt gttcctcaca gaatgagcat tgggtgaaaa atgaaatcaa 120
gatggaaatg taaaaaattt cttcgaactg gatgacacaa cctatcaaga cctttgggat 180
acagcatagg cactgctaag agcaaacttt gtagtcctaa aaacctacga caaaaagtct 240
gaaagagcac aaatagacaa tctaagttca cttctcaggg aactagagaa acaggaacaa 300
gccataccca atcccatcat acacaggaaa tacccaagat cagagccgaa ctaaatgaaa 360
t 361

<210> 1929
<211> 358
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(358)
<223> n = A,T,C or G

<400> 1929
gccatcatat gttctcattt atttgtggga tctaaaaatc aaaacaattc aactcatgga 60
gatagagagt acaagatggt taccagagac tgggaagagt agtggggaaa ttgggggagg 120
tgtgggaggt ttttttntnt tnttnttttnt ggttgacgag aagaccttat ggagcgttta 180
attattattg caaggggtac ctaaaaaccg atagggggttt aaggaacctg cctggggtta 240
atattttcca ttaggcgatc ttctgtgggg aaccccacct tccgagcagt catggcttta 300
attccccaat gtaaggcgaa cttctattcc tttattggtc ggaaaaaatt ggtcgacg 358

<210> 1930
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1930

gttatgctat atggcaaggg agaattacag ttgcagatgg aattaatgtt gctaatcagt 60
tgaccataaa atagggagac cataatatgg tcaataggag tttaccataa agctaggttt 120
tgtagttggg agggagggtg tagtgtattc agaaatatcc tggccgggca cggtggctca 180
cacctgtaat ctcagcactt tgggaggcca aggcaggcag atcatgaggt caagagttag 240
agaccagcct gaccaacacg gtaaaacccc atctctacta aaaatacata agttagccag 300
gtgtggtggt gcacgcctgt aatcccagct actcagga 338

<210> 1931
<211> 310
<212> DNA
<213> Homo sapiens

<400> 1931
agaatcgctt gaacctggga ggtggtggag gttgtagtga cccaggatca tgccattgta 60
ctccagccta ggtgacaaga gcgaggctcc atctcaaaaa aaaaaaaaaa aaaaaccaaa 120
ccctttggct tttgttggtt tttgaaaaaa agtttaattt tgtcccccag cctaaagggc 180
agggccggga tgtggcctaa ttgaaatttg aactccgggc ctaaggggat ccacccacct 240
aaccctccaa aagggctggg tttatgggct tgacccattg accccagctg gaaaccttta 300
acttttaat 310

<210> 1932
<211> 342
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(342)
<223> n = A,T,C or G

<400> 1932
agagggcagg gcttacaggg ctgtcaccct tattctccgc tgagctgttt taacacgtag 60
ccatccgcag atggcagctt ctaaaagagc attaattgta acagacccca agacactacc 120
atggggccag agcccaaaag tgctcacccc agctcctaca cctgcccctg cccatctgcg 180
tgctctccct cccataaggg gtttgagcac gtgtcggcca agcaaacgag cttcacccct 240
gtcacaagtc ctgagaggag tcagggaact ctcccatttc attctgacac aggtgggact 300
cagcattctc agaccttcaa aggcctgttg ggtggatgtg gn 342

<210> 1933
<211> 283
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(283)
<223> n = A,T,C or G

<400> 1933
atcaatgaag gattgataaa agttctcctg gtgtctccgc agagtgcctt ccaggaacag 60
atctttgcat agaatatcag tggtttcctt ttttgtttca aatagtggtc agaaaatacc 120
cagtgttgac tcaccaaggc aatcagcttc ctttttcccc ttttttgttt ttttttaaca 180
ttttatattt ttgctttatt ttatttttatt ttatttttatt ttatttttatt ttatttttatt 240
ttttgagacg gagttccact ctgtcgccag actggagtga agn 283

<210> 1934
<211> 383

<212> DNA
<213> Homo sapiens

<400> 1934
cgttgctgtc gcaaatttct tcctgctcag accatagtcc taattactta agaaaacccc 60
ttctaactgt gtggatcttt taacgtatgg tgcacatgag tgcatggaaa tgagagaacc 120
tgggtgacag agtgaggcac tgtctccaaa aaaaaaaggg aaaaaaaaaa aatttttttt 180
ggcttggatg aaggggggge taacccttta ttcccaccct ttgggaaatt tgaggttggg 240
ggatcatttg acctcaggag ttggaaccca ccctgggcaa cacagggaaa cccattcttt 300
acaaaccttt aaaaaaaaat gggccgggcc gggggggttaa cccttgtatt tccagccttt 360
gggaaggcca aggcggccgg ttt 383

<210> 1935
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 1935
tgtcaccagc ggactcatga tgacatcaaa gactataaca atgacaacct ccacagactc 60
cactcttgga aacacagaag agacatcaac agcaggaact gaaagttcta ccccagtgac 120
ctcagcagtc tcaataacag ctggacagga aggacaatca cgaacaactt cctggaggac 180
ctctatccaa gacacatcag cttcttctca gaaccactgg actcggagca cgcagaccac 240
cagggaatct caaaccagca ccctaacaca cagaaccact tcaactcctt ctttctctcc 300
aagtgtacac aatgtgn 317

<210> 1936
<211> 320
<212> DNA
<213> Homo sapiens

<400> 1936
tgtcaccaac acactcatga tgacatcaaa gactataaca atgacaacct ccacagactc 60
cactcttgga aacacagaag agacatcaac agcaggaact gaaagttcta ccccagtgac 120
ctcagcagtc tcaataacag ctggacagga aggacaatca cgaacaactt cctggaggac 180
ctctatccaa gacacatcag cttcttctca gaaccactgg actcggagca cgcagaccac 240
cagggaatct caaaccagca ccctaacaca cagaaccact tcaactcctt ctttctctcc 300
aagtgtacac aatgtgacag 320

<210> 1937
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1937
cgttgctgtc ggttaagctg tctcagaaag aattgcttgg tccaccagag gcaaagagag 60
cccgaggccc tgaggaagag gagattggga gccctgagcc catggcagct ccagcctctg 120
cctcccagaa actcagcccc ctacagaagc taagcagcat ggacccggcc atgctggagc 180
gcctcctcag cttggaccgt ctgcttgcct cccaggggag ccaggggccc cctctgttga 240
gtaccccaaa gcgagagcgg atggtgctaa tgaagacagt agaagagaag gacctagaga 300
ttgagaggct taagacgaag caaaaagaac tggaggccaa gatgttggcc cagaaggctg 360
aggaaaagga gaaccattgt cccaca 386

<210> 1938
<211> 349
<212> DNA
<213> Homo sapiens

<400> 1938
gtctacatat acacatatgt ctatacttgt gtttggatat tgtctacatg gtaccaaatt 60
gccgtaacaa taaatgagta atcaaaaatt aaataaataa gcccaaatat ttttcaagtt 120
cttgtgactt gagtaaatct tttggtaaat atgagtagct taatatagtt ggtttaataa 180
aaacaaatgt cttttgactt atcagcaaaa tatgcatgta tttaatgtta aggtgattgc 240
ttttatgata cttagataac atatgataat attaatagca aaatggttaa tacaaaattt 300
aagctgagat gatggctaga tttgtctaac ggctcatgaa atttttcca 349

<210> 1939
<211> 341
<212> DNA
<213> Homo sapiens

<400> 1939
gaatactcgt gaataaactt tgcaaaacta tttgtaaagt actataagga attctgagaa 60
gttactataa gatagaaaag aatataggag catgcccaag ccatatatat gatgtttcac 120
gtaatatgct tggtagactt gtaaaatatt ttagatgtgg tgtaggaata aatctttgat 180
gtaatttgtt tttttgtata tgtatatgat tttgaaattt gagacagaag ctataccatg 240
aaccaggctg gaatgcgatg gaaccatctt ggctcactgt tgcctgcagc tacctgggtc 300
aagtgattct tctttttttg gccttccatg gagcatgaga t 341

<210> 1940
<211> 342
<212> DNA
<213> Homo sapiens

<400> 1940
ccctcccacc ctctgttttt ttcttcttct tctctctctt ttttttttt ttaaaaaaaa 60
gggggcctct ggcggggtgg cccaggcggg ccaacatccc aaattcccaa attccccccgg 120
gcctaagggg atcctctaac ctaagccgcc ctttccaatt ttgaccccac ccccagtaaa 180
aataacttgt ttggcccgcc caggggggct caggacggaa accccaccat ttgggggggc 240
cgggggggga aaaccactgg accccaggag tttggggcca cccgggccaa caggggggaga 300
cggcctctcc taaaatccaa aaatttcccc gggggggggg gg 342

<210> 1941
<211> 311
<212> DNA
<213> Homo sapiens

<400> 1941
cctgtggtgt tattgtatac acacatatat atatatgatt ttgtgcatgg ttcctgggtc 60
aaactcccat ggccgttgtc ttttgttaga acagtctttt attagaacag tctagtaaaa 120
cagttctaac agtcttttgt tagaacactg ggtgtgttag gcctcaagaa acggaccctc 180
tccagcctta ttttggccta gtttcacctg cccaaaggca ggtctctaat cttcccctgc 240
ctttttgaat gcgggtcata agactgtacc cagaggccga acgcggtggc tcatgcctgt 300
aaacctagca c 311

<210> 1942
<211> 327
<212> DNA
<213> Homo sapiens

<400> 1942
gattataatc aagtgtaggc ttcctgaatt ttgacatcct tttagaactt gggtctggaa 60
ttccagaaat gttaattgct gcttgtattt gttcttgttt gtttttagc cagtatttgc 120
cctttctatc cagccttatg aataatagca gtaaaatcac agtatcttgg tcagtcttta 180
ttttttcctt ttttcttttt taagagacag tcatccaggc cagagtgcag tttgatgata 240
gcttgctgaa gcttcccact cctgggctca agttatcctt ccattttggc ctcctgagta 300
gctagaccat aggtatgcat caccaca 327

<210> 1943
<211> 325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(325)
<223> n = A,T,C or G

<400> 1943
cggtaaggag ttttcccact tgaaataaaa aaatgctaga cagcaacatg atggcataga 60
aaagtatgaa actcattggt aaatacaaat atatagacaa atactgaata ttactgtaat 120
gatggagggt aacacacttt taattcaact gtacatgtta aaagacaaaa ttagttaaaa 180
taactataaa taaatatatg gtaaaagata taccatatga ataaatgaac atagtgccaa 240
caataatata aagtgtaggg agaaaataag ttagagttac tggatacaat tgaacataag 300
ctgttatctg cttaataagg actan 325

<210> 1944
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1944
attccttatt tgaaaaagag caaagttgct catatcctca atatcagtcc accactgaac 60
ctaaatccag tttggttcaa acagcactgt gcttatacca ttgctaagta tggtatgtct 120
atgtatgtgc ttggaatggc agaagaattt aaaggtgaaa ttgcagtcaa tgcattatgg 180
cctaaaacag ccatacacac tgctgctatg gatatgctgg gaggacctgg tatcgaaagc 240
cagtgtagaa aagttgatat cattgcagat gcagcatatt ccattttcca aaagccgaaa 300
agttttactg gcaactttgt ca 322

<210> 1945
<211> 330
<212> DNA
<213> Homo sapiens

<400> 1945
ggctcaagag gaatgctcca ggaaagggat agtggatgaa ttcttcccgc tgttgtcaaa 60
ctaatgtata tggactcaac cacagggata tccccagagc tcctatggaa cactagcaaa 120
ttttgtgttt ttgttcagtc cgacatgggc tggccctcat cttgcagctc tgtaattttt 180
caatttacac ccaacaaatg aacttgagca ttgccatccc agctatggtg aacaacacag 240
ccccacctag ccagcccaat gcctccacag aacggccctc cactgactcc cagggctact 300
ggaatgaaac tctaaaagaa tttaaagcaa 330

<210> 1946
<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(384)
<223> n = A,T,C or G

<400> 1946
tacggtttcg agttgacgac agaagggcnt aaagacaagg atactttcca agaaatgctt 60
ccttacacaa ttttggcatt gtgtgaacat cgaacagtgt gttgacgtaa acctacatgg 120
tatagcgtac tgtatagtat agatagccca ggggttcctt atctctcagc cacggtatca 180
gtccatcacc tgttaagaac caggccacac agcagtaggt gatcagcggg caagctagca 240
gagcttcatc tttatttgca gctgctccca ttgcttgcat taccgcctga gctccacctc 300
ctgtcagatc agcggtagca ttagattcnc ataggagcac aaaccctatt gttaactgag 360
catgggacgt atgtatggac atan 384

<210> 1947
<211> 361
<212> DNA
<213> Homo sapiens

<400> 1947
tcaaaagaaa gttgtaaccc tgtgatatga atccacacac cacagagcag tttcatggat 60
aactaaccac tttctagttt taactgggaa tacccctttt ttcccttatt actcaatgaa 120
ctgcagaatg tccctttgca tattccaaaa agagtgtttc caacctgctg aaacaaaata 180
atactttaac tctctgagct gaatccacat atcacaaagg agtttctcag ataggatctt 240
tctagttttt ggctgaggat atttggtttt tcctcatagg cctcagaggg ctcccaaatg 300
tctcctcaca gattctaaca aaagagtgnt tcaaacttgc tgaatcaaaa gaacatttta 360
g 361

<210> 1948
<211> 393
<212> DNA
<213> Homo sapiens

<400> 1948
ggcacgaggt tgggtagaga cggggtttna ttcgtgttag ccaggatggt cttgatctcc 60
tgagctcgtg atccgccctc ccgcctcggc atctcaaagt gctgggatta caggcgtgag 120
ccacggcgcc cggacttcct tctttttaa gcaaagcctg ttagaatggc ttggatctcg 180
aggtggcgtc ttacccgacc tccgagggct ctgcagccgc tgcgggagaa tgaccctgtc 240
ggtatttttg aggctgcttt gagcgcggcc ccctgccaag tacccggcca tcaaggccct 300
gatgcggcca gacccgcgcc tcaagagggc ggcgctggtg ctggtgctgg tgcagatgct 360
ggcctgctgg ctggtgcgcg ggctggcctg acg 393

<210> 1949
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 1949
cagcacacca acatggcaca tgtatacata tgtaacaaac ctgcacgtta tgcacatgta 60
ccctagaacc taaagcataa taataaaaaa taaataaata aataaaaaga aattaagcct 120
ccttttttnt ttttttttta aaaaggattt ccacttttgt ggccaaggct gatgggngtg 180
gnccnaaagc tatcataaac tttagtcccc cttctcaact tgaatctttc cagaaaaaac 240

cactcccgct tattacccga aataggagaa aaaagttcaa tgggaaaaca aagtggttct 300
ttattcctta aaaagag 317

<210> 1950
<211> 350
<212> DNA
<213> Homo sapiens

<400> 1950
aagggtctca cctgccagag atctgtgcaa ttaaaaacac ccacagctga accgttcagg 60
ggctggcaat ttttttttt ttttttttt aaaagggact cgggttttgt ggccaaggtg 120
gggggaaaa ggggcaattt ttgttttttg aacccttaac ttccggggtt aaaggaaggg 180
gcccacttaa gtttccgggg aagttaaaac aaaggggcca cacaaaaaaa tcgggcaaat 240
tttaaaattt ttgggggaaa cgggagtttc gttttgttcc caaggtgggt ttcaaattcg 300
ggggttaagg gaaccctccg gcttgggttt ccaaaagggc ggggataaaa 350

<210> 1951
<211> 415
<212> DNA
<213> Homo sapiens

<400> 1951
ggcacgagga agagcaaccg agatgattgt gaagatgctg agccggaatc cggacaatta 60
tgtccgcgaa accaagttgg acttacagag agttccaaga aactatgatc ctgctttaca 120
tcctttgag gtcccacgag aatatataag agctttaaat gctaccaaac tggaacgagt 180
atttgcaaaa ccattccttg cttcgctgga tggtcaccga gatggagtca attgcttggc 240
aaagcatcca gagaagctgg ctactgtcct ttctggggcg tgtgatggag aggttaaaat 300
ttggaatcta actcagcgga attgtatccg tacaatacaa gcacatgaag gctttgtacg 360
aggaatatgt actctctttt gtgggacttt ctttttccac tggtggggat gacaa 415

<210> 1952
<211> 345
<212> DNA
<213> Homo sapiens

<400> 1952
gatttgaaag gaatgaggat cctgcactct tcctccctca gtaagtaaat gccagtccct 60
aggaagagag aaccaaaatg tctaccggac cagatgtcaa ggctacagtg ggggacattt 120
ccagtgatgg caatttaaac gtggctcaag aggaatgctc caggaaaggt ttttgttcag 180
tccgacatgg gctggccctc atcttgcagc tctgtaattt ttcaatttac acccaacaaa 240
tgaacttgag cattgccatc ccagctatgg tgaacaacac agccccacct agccagccca 300
atgcctccac agaacggccc tccactgact cccagggcta ctggg 345

<210> 1953
<211> 342
<212> DNA
<213> Homo sapiens

<400> 1953
gccagtccct aggaagagag aaccaaaatg tctaccggac cagatgtcaa ggctacagtg 60
ggggacattt ccagtgatgg caatttaaac gtggctcaag aggaatgctc caggaaaggt 120
ttttgttcag tccgacatgg gctggccctc atcttgcagc tctgtaattt ttcaatttac 180
acccaacaaa tgaacttgag cattgccatc ccagctatgg tgaacaacac agccccacct 240
agccagccca atgcctccac agaacggccc tccactgact cccagggcta ctggaatgaa 300
actctaaaag aatttataag catggtaagt taatgagact ct 342

<210> 1954

<211> 330
<212> DNA
<213> Homo sapiens

<400> 1954
aggcgtgctg tgcaaatggc acacctggtc caaccaatct tttgtgccct atgtaaatca 60
gacaccgcct cctcaaactc atttataaaa cctgcatttc actgcagaag tggcaatcca 120
ttttctccag ggcccctctc tgttcagaga gctctttctt ttgcctgtta aacttctgct 180
ctgaacctca ttctttgtgt gccggcgtcc tagttttccg tggccatgag accacgaatc 240
tcaggtattt accccagacc acagtgctgc ttcattacca cgttcctgat tcctaaaggc 300
ccagggcaga ttgaacccta agttcagttt 330

<210> 1955
<211> 320
<212> DNA
<213> Homo sapiens

<400> 1955
caaaggcaaa gatgttacag aaaaagagaa gaatatagat ttatatcctt tatgaatatt 60
gatgcaaaga cgttcaacaa atactcacaa attgaattta acaatatatc aaaagattat 120
acatgatgat caaatgagat ttattcctgg aatgtatggc taattcaaca tacaaaaaaa 180
caataaatgt aatacaccac attaacaaaa taaaggatta aaaaaagacc atttcaaata 240
ctgcagaaaa agcttttgac aaaattcaac actcttgcat ggtaaaaaca gtcaacaaac 300
taggaataca aataatgtcc 320

<210> 1956
<211> 323
<212> DNA
<213> Homo sapiens

<400> 1956
ggctgctctc tggccactag agccaggcag tcacctagct gctgttatgc tgcatacctg 60
tctctgagta ctcgcttcat ccatcggcca gggtctgtgg gacagaccag gcaggtggtg 120
ccccatgtga ggaacgctgc aatggattgc aagggaaccc ctgaaaacaa atgtgaagtg 180
actgagcagt gttaaccttа gaagactaga acctaatgag ttatggcaaa cagatgttat 240
gcacgtccct gaatttggaa aactaaaggc ctctttggat tccagcacga ggcatcaaac 300
cataccatgg catgggtagg aac 323

<210> 1957
<211> 355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 1957
gaaagaaaga agaaaagatc ttgtaaaagt tttcaccaa aacattttca ctttgccaca 60
actttcaaag ctacccttta tctactcttc acactccaaa taatactaac aactttaact 120
cgcagtaaag tatagcagga gtagtaacta ccatttatta aatgcttatt atgtatcaag 180
taccatgctg agttctttat gtcatctcat atatttattt tgagacaggg tctcactctg 240
tcacccaagc tagtagtgca caatcatggc tcactacagg cttgacctcc tgggcttaag 300
catcctccca cctcagcctc ccgagtanta anactacaga tatgtgccac cactg 355

<210> 1958

<211> 172
<212> DNA
<213> Homo sapiens

<400> 1958
cacccatcaa gtcattatta ccctcactgt cgacccaaca caggcatgct catgtgaaga 60
tgcgaaaaaa cgacagaaag gaacgggggc gttttttga tagatcgcaa cgggggagaa 120
acctttgggg gagggggccc gccccccttt atgaggggg ggaaaaaatg gt 172

<210> 1959
<211> 344
<212> DNA
<213> Homo sapiens

<400> 1959
gaggtgcccg agctactgag ggtctaagtc cgggcagccg aagagtgtgg ttagcaagat 60
gaacaaagat gcgcagatga gagcagcgat taaccaaaag ttgatagaaa ctggagaaag 120
agaacgcctc aaagagttgc tgagagctaa attaattgaa tgtggctgga aggatcagtt 180
gaaggcacac tgtaaagagg taattaaaga aaaaggacta gaacacgtta ctgttgatga 240
cttggtggct gaaatcactc caaaaggcag agccctggta cctgacagtg gaaagaagga 300
gctcctacaa agaataagaa catttcttgc ttaacatgcc agcc 344

<210> 1960
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1960
gaaagaaaga agaaaagatc ttgtaaaagt tttcacccaa aacattttca ctttgccaca 60
actttcaaag ctacccttta tctactcttc acactccaaa taatactaac aactttaact 120
cgcagtaaag tatagcagga gtagtaacta ccatttatta aatgcttatt atgtatcaag 180
taccatgctg agttctttat gtcatctcat atatttattt tgagacaggg tctcactctg 240
tcacccaggc tagtagtgca caatcatggc tcactacagg cttgacctcc tgggcttaag 300
catcctccca cctcagcctc ccgagtagtt aaaacta 337

<210> 1961
<211> 348
<212> DNA
<213> Homo sapiens

<400> 1961
ggctgatgcc attttcagcc tcagcacgcc tgcacccagg cgctcattaa aacagcatgt 60
tgctccccac tgcctcgtgt tgtctgttgg cgcgctgacg gggttcgaac cgatacaaga 120
accttccacc tacctggtgc tttggcctca tctataagct tttccactgt cctgaaacaa 180
gatagagaat ctgagcggcc agtcatctgc cctaagtgct gccgccgaag actgaatgtc 240
ctggaaagtt tgctgtcaca tctccattat gacaaaagca ttgcgccgaa cagatgaaaa 300
aatgcattgt caacggaatc ttttatgttt ggttgtcttc ctttaagc 348

<210> 1962
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1962
tgggtatata taatttacag aaagtctatg tgtaaatcat tgactgactt aactccgact 60
gatcactctc tgtacggaac cacctaatga gatcttttg cctgacacct agatagagcc 120
cattaccaag acagaggaat tacaatacag agtttaatcc atatagaatt ggctaaatgg 180

gagattcaag ttttattatt actcagatca ccctttccaa aaatccagag ggtagggttt 240
tctaaacacg gtttgttggg cagcggtcta aggaatgagg aaagctgatt ggttgtgttg 300
cggataaaat cataggggtt aaaactgt 328

<210> 1963
<211> 137
<212> DNA
<213> Homo sapiens

<400> 1963
tgtaaataaa gttttattgg aacagaaaca cactcctttg tttacatagt ggctatggct 60
gcctttgtga tagaatagca gaattaattg actgtgccaa agattgtaca gccagtaaaa 120
taaaaaatat ttactgg 137

<210> 1964
<211> 323
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(323)
<223> n = A,T,C or G

<400> 1964
ctcctctttc caggtgctcc ccgagcctca caggtctggc tcctgggcac gtagcaagct 60
ctttccctac ctttacttcc ttttcattcc ctttttttct ttttaaactt aatgggggca 120
aggttaacat ataaaaaaat ccccttttct ggaaaaaaga aacaaggggt tttaagaacc 180
tttacccatt agggcaatta taacaggccg gtttaaaaac atggttatgg accaaaaaaa 240
cccctccggc gggggggggac cacctgaagt cgggagttaa aaaccagccg gaccaacagg 300
gggaaacccc atctttacaa aan 323

<210> 1965
<211> 320
<212> DNA
<213> Homo sapiens

<400> 1965
gctgctctct ggccactaga gccaggcagt cacctagctg ctgttatgct gcatacctgt 60
ctctgagtac tcgcttcatc catcggccag ggtctgtggg acagaccagg caggtggtgc 120
cccatgtgag gaacgctgca atggattgca agggaacccc tgaaaacaaa tgtgaagtga 180
ctgagcagtg ttaaccttag aagactagaa cctaatgagt tatggcaaac agatgttatg 240
cacgtccctg aatttggaaa actaagcacg aggcatcaaa ccataccatg gcatggctag 300
gacccaaccc ggtaccaaaa 320

<210> 1966
<211> 363
<212> DNA
<213> Homo sapiens

<400> 1966
ggataagcta caacataaac acatctaggt tcttgttctt agaatacagc atgaagaatt 60
tgctttcttc tttcttccta acattttcat gtgagatcca gaaaggacac attgtctctg 120
gccattcgaa gaaagaaaga aagaaaaaaa aaagggtttt tagagaccga gagagaaaaa 180
ggctgaaatg ggttcgctgg gttctaaaaa tccgcaaacc aaacaagccc aagttcttct 240
tttgggactt gactcagctg ggaagtctac tctcctttat aaattaaagc ttgctaagga 300
tattaccacc atccctacaa taggtttcaa tgtggaaatg atcgagttgg aaaggaatct 360

ttc 363

<210> 1967
<211> 363
<212> DNA
<213> Homo sapiens

<400> 1967
cggggttctt gttcttagaa tacagcatga agaatttgct ttcttctttc ttcctaacat 60
tttcatgtga gatccagaaa ggacacattg tctctggcca ttcgaagaaa gaaagaaaga 120
aagaaaaaaa aggtatttag agacagagag agaaaaaggc tgaaatgggt tcgctgggtt 180
ctaaaaatcc gcaaaccaaa caagcccaag gtcttctttt gggacttgac tcagctggga 240
agtctactct cctttataaa ttaaagcttg ctaaggatat taccaccatc cctacaatag 300
gtttcaatgt ggaaatgaac gagttggaaa ggaatctttc actcccagtc tgggatgtgg 360
gag 363

<210> 1968
<211> 341
<212> DNA
<213> Homo sapiens

<400> 1968
tataacagga actcaaagac aatgcacagg gctataatct aagaacagat gtattaacag 60
ccttactcac tgtaaggctg ggaacccttg aagccaggca ttatatgcac attctcaaat 120
atgatgctct agttaaagcc ttggtaatat atataaccaa tgtttccaac tgcatcctgt 180
tataaagaga gagcaaattt tattaaactt atgtaaataa ttcttgccat aaaaaataag 240
aatactcatg gatagtttct gaattttaga ggaatcaaat agggacaaaa aaaaatgttt 300
ccacctttgt tcacaaagta taccaaatta ctggtaacta a 341

<210> 1969
<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(384)
<223> n = A,T,C or G

<400> 1969
tacggctgct agaagacgac tgaagggtgt ggtacattca gacattgtaa tattacccac 60
tgctaaaaag aaatgtgcta ttaagctatg aaaagacatg gagaaaaatg cattttacta 120
agtgagagaa gccaatctga aaaggctaca tagtatatga ttccaagtac agttgactct 180
tgaacaatac aggtttgaac tgcatagatc tacttataca gggatttttt ttcagtacat 240
acagttggcc ctctgtgtct gtgggttctg cctctgcaat gaaacatgga tagaaaattc 300
agtattagcc tgggcaacaa aatgagaacc tgtctctaca aaaaatttaa aaatttagct 360
gggcgcagtg gctcacacct gtan 384

<210> 1970
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1970
gaaaacattg ctcctaactc caccgcctac cccaaaacct ataagaacta atgataatcc 60
caccaccctt tgctgactct cttttcggac ttagcccgcc tgcacccagg tgaaataaac 120
agccttgttg ctcacacaaa gcctatttgg tggtctcctc acatggacgt gcatgacatt 180

gggtgctgaa acccgggaca ggaggactgc ttcgggagac cagtcccctt cccctgtcct 240
cgccctcact ccttgaggag atccacctgc aacctcgggt cctcagacca accagcccaa 300
ggaacatctc atgaatt 317

<210> 1971
<211> 299
<212> DNA
<213> Homo sapiens

<400> 1971
aactgttgga ttttgttagt attctctatt atttttctat tctccattct acttatttct 60
actcttatct ttattatttc ttcccttctg gtagatttgg gtatggtttt tttctttctt 120
ttttttccaag tttcacaatc tgtagattta ggttgttggt ttgacgcctt tcttatcttt 180
aaatttaatg gtgtatagct ataaattgcc tcgtttgcac tgttttcact gtttcccata 240
cgtttggtat ggtttctttc atgtgcattc atttttaagt atttttctat ttcccttgg 299

<210> 1972
<211> 285
<212> DNA
<213> Homo sapiens

<400> 1972
ggttatcagc caagagtttg tatctagtga aactaagcat catatacgaa ggaaagatac 60
attcttttttc agacaaacaa atgctgagag tatttgccac taccaagcca ccactatacg 120
aactgctaaa aggagctcta aatcttgaaa caaatccagg aaacacatca aaacagaacc 180
tctttaaagc ataaatctca caggacgtat aaaacaaaaa taccatttag aaaacaaaac 240
aaaacaaaaa ccaaggtata caggcaacaa atagcacaat gaatg 285

<210> 1973
<211> 305
<212> DNA
<213> Homo sapiens

<400> 1973
tacggctcca aaaaacaaca aaagggtccg gttgcaaaaa aacaacaaaa gggtccggtt 60
gcaaaaaaac aacaaaaggg tccggttgca aaaaaacaac aaaagggtcc ggttgcaaaa 120
aaacaacaaa agggttcttt tttcaaaaaa ccacacaagg ttacgcctgc atgcagacca 180
ctgaggggtc cctctgtgac aaaaccatca acctttacgg ctgccccaat accaccaatg 240
ggtacgtctg cgccaaaact acagacgggg acggtgtgag acctcaacag aagggtatga 300
ttttt 305

<210> 1974
<211> 387
<212> DNA
<213> Homo sapiens

<400> 1974
ggcacgaggt gagccaaggt cacgccactg ccctcctgcc tgggcaacag agcgagattc 60
ttatctccat aaaatgaaac aaagcaaaac aaagggagag agaatggagg ttgcctgtta 120
ctgcatcata atcttgttta tgctgactga tgcattagag gtactaatgg catgagagga 180
acaatttcct gagacacagt ttactgacca tgaatttcct caaaacccca gagagcaggc 240
ttctcaggag gagactcagt gtggaatccc ttgccaaggt agaccctggt tctgtagcag 300
gacgagccgc agacaaatct cctcaagaca ccggattaaa gaaggaaaag gtttatttgg 360
ccaggagcgt cagcagattt gtgtctt 387

<210> 1975
<211> 368

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(368)
<223> n = A,T,C or G

<400> 1975
ggatgccatt ttcagcctca gcacgcctgc acccaggcgc tcattaaaac agcatgttgc 60
tccccactgc ctcgtgttgt ctgttggcgc gctgtcgggg ttcgaaccga tacaagaacc 120
ttccacctac ctggtgcttt ggcctcatct ataagctttt ccactgtcct gaaacaagat 180
agagaatctg agcggccagt catctgccct aagtgctgcc gccgaagact gaatgtcctg 240
gaaagtttgc tgtcacatct ccattatgac aaaagcattg tgccgaacag atgaaaaaat 300
gcattgtcaa cggaatcttt tatgtttgtt tgtcttcctt taagcaacat tgccttactt 360
gttataan 368

<210> 1976
<211> 339
<212> DNA
<213> Homo sapiens

<400> 1976
gtggggcacg cctatattcc cagctactca ggatgctgag atgggaggat caactgggcc 60
tagggaggtc gaggctgcag tgagctgtga tcgtgccact acactccagc ttgggcgaca 120
gagtgagacc tcatctcaga ataatatgaa ataaaataaa atataaaata aaatactata 180
aggagtcctt taggctgaaa ggacaacaaa ttagatggct agttgaatcc acacagagaa 240
ataaagagca ttggcaaagg tcattgcata gataaatata cagtataaaa atatataggc 300
ttactctttc cttcttttaa ctaaattaaa agatgaatg 339

<210> 1977
<211> 342
<212> DNA
<213> Homo sapiens

<400> 1977
ggctgatgcc attttcagcc tcagcacgcc tgcacccagg cgctcattaa aacagcatgt 60
tgctccccac tgcctcgtgt tgtctgttgg cgcgctgtcg gggttcgaac cgatacaaga 120
accttccacc tacctggtgc tttggcctca tctataagca gcttttccac tgtcctgaaa 180
caagatagag aatctgagcg gccagtcatc tgccctaagt gctgccgccg aagactgaat 240
gtcctggaaa gtttgctgtc acatctccat tatgacaaaa gcattgtgcc gaacagatga 300
aaaaatgcat tgtcaacgga atcttttatg tttggttgtc tt 342

<210> 1978
<211> 406
<212> DNA
<213> Homo sapiens

<400> 1978
cgttgctgtc gaaatggggc tgagtgcagt ggctcatgcc tgtaatccca gcacttaggg 60
tgccaatgtg gattacctga gcccaggagt ttgagaccag cctgggtaac agtgagaccc 120
ccctccctac aaaagatttt aataattagt tgggcgtagt ggtgcatgcc tgtaatccca 180
gctactctgg agacaggtgg aggggattgc ttgagcctgg gaagctgagg ctgcagtagc 240
catgactgca ccactgcatt ccagcctggt tgacagagtg acccttgtct ccaagaaaaa 300
aaaaagcaaa tgggattaag gactcatgca atgggaaggg gaaaggggag tcttactata 360
tgtggaataa acttgctcag tgttgccaca gagttacatt accaat 406

<210> 1979
<211> 357
<212> DNA
<213> Homo sapiens

<400> 1979
ggattttgat agggattata ttgaatctgt agatcaattt gggagaattg ccatcttaat 60
gatattaagt cttccaattt atgaacttag gatgtctttc tatttactta ggtcttcttt 120
aatttctttt ttttttttta aaaaaaaaaa tccccctctg ttacctcccc gggacccccg 180
gggctcaagc agcccttccc tttcacccca ccaagaagtt aggcccccgg gggccccccc 240
ccccctctat ttctgggggg aggaaggcac tcccctattt tcctctcttt agaaatctgg 300
gtcgcccatt ctcgccccca tttcgcctcc cctcctttcc ttgtctcctc aacctct 357

<210> 1980
<211> 361
<212> DNA
<213> Homo sapiens

<400> 1980
gcccactggc gggactggac agatcaccgc agaaaactaa caaattctcg acttaaattg 60
aagttttgac caaatggacg taatacacac gtacagaata ccctacccaa caaccacaga 120
atacacattt tactcatctt tgcatgctct aaaaatgacc acatgctcag tcataaagca 180
agtctcaata aattcaaaaa agcagaaatc ataccaagca tctgtttgga ccacagttga 240
ataaaattag aaatcaatac caagaataac tctgaaagcc acgtaagtac atggaaatga 300
aacagtttgc tcctgaatga cgtttggcta aacaaaatta aggcagaaat acaaattttt 360
t 361

<210> 1981
<211> 341
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(341)
<223> n = A,T,C or G

<400> 1981
cacatccatg aatgtcaagc gtccctaaaa tgaggaccac attgtttaca acactaaaaa 60
tgtagaaatt gtactcaatt tagttgataa acatttttga atattaagct attaaaaatg 120
gcagatcatt aaaaaacata gaaacttcaa ttccaatctc tagtaaatgt tcacattcaa 180
aaatatgtag tatttttaaa aattcagatg gggttttact aggttgccca gaaagatctc 240
aaactcctgg cttcaaggga agagtttaat cctgccccag cctcccaaga agatgggatt 300
ataggcatgc accactaacc ctggcctata aatacacttt n 341

<210> 1982
<211> 357
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 1982
ctctcaggct gtgtgagcca tttgagaaga tatacagcag agggaatact tcgtatgtca 60

ttctatgaag ttcacatcac ccatttacca gaaccagact aacaatgttc ccgaaaaaaa 120
ttacagatta atatctctca tgaccataaa tgctaaaatc agaatattgg gacatcaatc 180
ccacaaattt ataaagagaa ttatacgcca ttaccaagta aatttttttt tccaggtttg 240
taagactggt tcaacattca aacgttgatt aatatgattc atcacatgaa aaagtaaaat 300
gagaaaacag tacaatcata tccctagatt cagagagagc atttgacaca atccacn 357

<210> 1983
<211> 324
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(324)
<223> n = A,T,C or G

<400> 1983
ggctgatgcc attttcagcc tcagcacgcc tgcacccagg cgctcattaa aacagcatgt 60
tgctccccac tgcctcgtgt tgtctgttgg cgcgctgtcg gggttcgaac cgatacaaga 120
accttccacc tacctggtgc tttggcctca tctataagct tttccactgt cctgaaacaa 180
gatagagaat ctgagcggcc agtcatctgc cctaagtgct gccgccgaag actgaatgtc 240
ctggaaagtt tgctgtcaca tctccattat gacaaaagca ttgtgccgaa cagatgaaaa 300
aatgcattgt caacggaatc tttn 324

<210> 1984
<211> 309
<212> DNA
<213> Homo sapiens

<400> 1984
gctctttacc ctcattggcg cttctctcct gcagtccgcc tctgggccct gccgcatttc 60
ttgagactta aagtggcatt ctaaaggcaa tttaaaaatc atgtcaagct cagttgaaca 120
gaaaaaaggg cctacaagac agcgcaaatg tggcttttgt aagtcaaata gagacaagga 180
atgtggacag ttactaatat ctgaaaacca gaaggtggca gcgcatcata agtgcatgct 240
cttttcatct gctttggtat catcacactc tgataatgaa agtcttggtg gattttctat 300
tgaagatgg 309

<210> 1985
<211> 305
<212> DNA
<213> Homo sapiens

<400> 1985
gctctttacc ctcattggcg cttctctcct gcagtccgcc tctgggccct gccgcatttc 60
ttgagactta aagtggcatt ctaaaggcaa tttaaaaatc atgtcaagct cagttgaaca 120
gaaaaaaggg cctacaagac agcgcaaatg tggcttttgt aagtcaaata gagacaagga 180
atgtggacag ttactaatat ctgaaaacca gaaggtggca gcgcatcata agtgcatgct 240
cttttcatct gctttggtat catcacactc tgataatgaa agtcttggtg gattttctat 300
tgaag 305

<210> 1986
<211> 321
<212> DNA
<213> Homo sapiens

<400> 1986
actttaagat ttatatgaaa aggaaaaagc attagaataa tcaggagttt tgaaaaagaa 60

aaatgaagct gaaagaatta cactaaccga ttttgagatt tgctataaag atacattaat 120
caagacaata tggtgttagt gaaaggatag acccataaat caatggaaca taatagaggg 180
tccagaaata aatccacaca aatatggtcg attgattttt aaaagttgca agaattctga 240
aaggtgaaag acagccattg ctacaaatat gccataacaa acaaaaaagc cattcttgac 300
ttatacaata ctctatgatg g 321

<210> 1987
<211> 365
<212> DNA
<213> Homo sapiens

<400> 1987
tcaaaagaaa gttttaaccc tgtgatatga atccacacac cacagagcag tttcatggat 60
aactaaccac tttctagttt taactgggaa taccccttt ttcccttatt actcaatgaa 120
ctgcagaatg tccctttgca tattccaaaa agagtgtttc caacctgctg aaacaaaata 180
atactttaac tctctgagct gaatccacat atcacaaagg agtttctcag ataggttctt 240
tctagatttt gtctgaggat atttggtttt tcctcatagg cctcagaggg ctcccaaatg 300
tctcctcaca gattctacaa aaagagtgtt tcaaacttgc tggatgaaaa gaaaaattta 360
actcc 365

<210> 1988
<211> 381
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(381)
<223> n = A,T,C or G

<400> 1988
cgttgctgtc ggataaaata agggttttaa ttcccagcta tctctctcaa attttaagag 60
agatgttatg gactgtgctc tccccacaac ccggcccata agtcgcatgt tgaagttctt 120
acctctagta ccttggactg tgactatatt tggaaacagg gcctttaaag agacagttaa 180
gtgaaaagga ggcctttagt atgggcctag tgtaatctga ccagccctta tcagattaat 240
aaagttaaat acacagaaag ataccacaga tgcattagcg caaaggaaag accatgtgag 300
cacacgaaga gaaggcagcc ataggcaagc caaagacagt ggccttagaa gaaatcaacc 360
ctgccagtac cttgatcttg n 381

<210> 1989
<211> 124
<212> DNA
<213> Homo sapiens

<400> 1989
gctaaatcta tccccatacc cactcgacct tactacgcta caaccttagc caagccattt 60
actccattaa atgtttagtc gatacaattt ggttctttgg cgccttacga tattgtttcc 120
ggtg 124

<210> 1990
<211> 325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(325)

<223> n = A,T,C or G

<400> 1990
cacgtgtggg ggcttacgac tcttaggctc ccccttcaaa aggcctttgt ttgcgaatca 60
tgagatccta atacttaaac cgtcctcacc atcatgtgga aaccatgtct ttactacaac 120
tactgcattt attctattgt tctggctcac atctgtagat cccaactgct ctggaggctg 180
aggcaggaga attgcttgag cccatgaagc ataggttgca gtgagccgag atcattccat 240
tgcgctccag tctggcgaca gaacaagact ctgtctcgna aaaanacatt ataaannnnt 300
tttggcggcc tttttttcta aattg 325

<210> 1991
<211> 380
<212> DNA
<213> Homo sapiens

<400> 1991
cgttgctgtc ggtgaaccac cgcgcctggc tgagataggt tgtttttga attaactatt 60
ctttttttt ttttttttt tccgaaccaa aatttccttt ggggtccccc ggctggaggg 120
ccgggggcca aaaaataagg cttctgggac ccttggcccc ccaggtttag gggattcccc 180
ggccttaatt tcccaagcag gggggattaa cgggttgggc ccctcccccc gggggatttt 240
gttttttggg aaaaaacggg gtttttcaat gggggccagg cgtgttttga atctcccacc 300
ctggggggac cacccctcct tgggcctcca acggcccgcg gctaccagct cgccacccca 360
ctcccatgca ctgcagtctg 380

<210> 1992
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1992
accaaaaagc atgacatata gaaaacaaat aacaaaatgc agaagtcagt ccttccttat 60
ctgtaattac attaaatgta aatgaattaa aaggcagaaa ctggcagaac agatgaaaga 120
aaaaacaagt ccaactatgc acagtctaca agatactcac tttggattca aagatgcata 180
taggttgaaa ggagaaggat gaaaaaatat attccatgca aaaaacaagg aacaaaagag 240
tggctatact aatatcagac aaaatagact ttaagacaaa attgttgggc caggcacagt 300
ggctcatgcc tgtaatcctc agcactttgg gaggccgagg caggcagatc ac 352

<210> 1993
<211> 404
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(404)
<223> n = A,T,C or G

<400> 1993
ggcacgagcc gagatgaagg tgaagatgct gagccggaat ccggacaatt atgtccgcga 60
aaccaagttg gacttacaga gagttccaag aaactatgat cctgctttac atcctttga 120
ggtcccacga gaatatataa gagctttaaa tgctaccaaa ctggaacgag tatttgcaaa 180
accattcctt gcttcgctgg atggtcaccg tgatggagtc aattgcttgg caaagcatcc 240
agagaagctg gctactgtcc tttctggggc gtgtgatgga gaggttagaa tttggaatct 300
aactcagcgg aattgtatcc gtacaataca agcacatgaa ggctttgtac gaggaatatg 360
tactcgcttt tgtgggactt ctttttttcac tgttggtgat gacn 404

<210> 1994

<211> 398
<212> DNA
<213> Homo sapiens

<400> 1994
cgttgctgtc gctattattc ctgagaattt gttatattag gattagcaaa aacaaagctg 60
attggtaata taactaacat aaattgcttg gtaactttat ttttttaaga ttatggttta 120
gcgtgtgtca cattttatgg agttaattct acagtgtaaa gtttgagctt gattttagca 180
tttcagtgac ttgctaataa aataaataat ttaccaccat tgtcctatac catttctttt 240
gacaacagtg agctactgtt ataattaagg cagtaattac tattgagaaa ttcactgaag 300
caggtagaag aagatagatt gacttgttgt tttcctttaa cagaaggatc aaaacccagc 360
agagtgcaag cagcagtgaa gcaagatgta tgtggccc 398

<210> 1995
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1995
aattcgagcg gctgcttcct ttttttttct ttttttttaa aaagaaatcc acctttgtc 60
cccagactat gaaggcaagg gggccaaccc agatgaatgg atccctctgc ccccggggta 120
aaagaatttt ttgccctaac cctccaaaga agtgggatta aaggcccctg acacaatgcc 180
agggtaattt tttggaattt aaaaaaaaaa gggggttca atattgtggc taaggcggtt 240
ttgaaccccc gacccggggg accacccccc ttggcccccc aaaggggtgg gattaacggg 300
ttggacccac gggccgggcc tttccttgtt ttttttaaa aaccaattag gggggtgtgg 360

<210> 1996
<211> 122
<212> DNA
<213> Homo sapiens

<400> 1996
gatggcagtg ccaccatgct ggatcttgcc atggactgtg gggtcaactt ggtttatgct 60
ggacccggtg atgattcttt tttcatgttg gtactttgca tgttggtagt tcgtacaagc 120
tt 122

<210> 1997
<211> 368
<212> DNA
<213> Homo sapiens

<400> 1997
agcatgaaga atttgctttc ttctttcttc ctaacatttt catgtgagat ccagaaagga 60
cacattggct ctggccattc gaagaaagaa agaaagaaaa aaaaaaaggg tttttaaaga 120
cagaaagaga aaaaggctga aatgggttcc ctgggttcta aaaatccgca aaccaaacaa 180
gcccaagttt ttttttgggg acttgactca cctggaaagt ctactctcct ttataaatta 240
aagcttgcta aggatattac caccatccct acaataggtt tcaatgcgga aatgatccag 300
ttggaaagga atctttcact cacagtctcg gatgttggag gacaggaaaa aatgagaact 360
gttggggg 368

<210> 1998
<211> 345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(345)
<223> n = A,T,C or G

<400> 1998
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acagcccaat tcctagtcag attaagataa attaccatgt caaaggttta tttacctcag 180
tatctattac gctatctaag atgcctgact tttacccctg agatacaaag catgcctaag 240
caagaaaaat cacagtctaa ggagacaaag caagaatcag aaccagactt agatatgtaa 300
cagttgttgg aactatcaga caggaaattt aaaataacca taatn 345

<210> 1999
<211> 319
<212> DNA
<213> Homo sapiens

<400> 1999
gcaccttgag gaccattcac ttcttggatg caatcaaaga acttttccat ctcacttcct 60
tctcccagtg tccacatagt gcccctcaat gtttcattct catggtttaa agcactggct 120
tcaggcggtg aagatcagca aagacactcg ctcagctggg tatttgtatc aggctgggtt 180
cctcagagaa ggagaaacta agccaacagg atatttgtgt gagtgtgtgt gtgtgtgtgt 240
gtttgtgtgt gtgtgtaata tatgtcataa acatctattt actattgtat ggtatttatt 300
tatgaataat attatatac 319

<210> 2000
<211> 352
<212> DNA
<213> Homo sapiens

<400> 2000
agaggttgag gctgcagtga gctgacatcc ccactgcact ccagcctagg tgacacagca 60
agactttgtc ccctgttatt aaaataaata aagattgagg ttggtccgag tacagaggta 120
tttgcaactg attgattaca actaggtaca gatttgtttg ttccttctcc actcccactg 180
ctttacttga ctagcctaaa aaataataat aataactctc tctatatata tattttagac 240
agagtctccc tctgtcaccc aagctggagt tcaatgggca tgatcacgac ttactggagc 300
ctcaaccttt ccaggctcag gttatccttc caacctaact tttctgaaga gg 352

<210> 2001
<211> 310
<212> DNA
<213> Homo sapiens

<400> 2001
gagcaccatc ccccccttt ttttttttt ggaaaaggga ccctcttttt gtcccccagc 60
taaaagggga gggccgggat ttgggttaat ggaaacctcc ccctcttgtt ttaaggggat 120
tttcttgcct acccctccaa aaaattggga ataacagggg cctgcccccc ccccggggag 180
atttttgttt tttaaaaaaa aacggtttca ccgggggggg ccgggtggtt ttaaacctcg 240
ggccctaggg ggacccccc cgctcgccct cccaaggggt tgtttttacg ggcaggaccc 300
cccccccccc 310

<210> 2002
<211> 326
<212> DNA
<213> Homo sapiens

<400> 2002
ggctgactct cttttcggac ttagcccgcc tgcacccagg tgaaataaac agccttgttg 60

ctcacacaaa gcctatttgg tggtctccac acatggacgt gcatgacatt gggtgctgaa 120
acccgggaca ggaggactcc ttcgggagac cagtcccctt cccctgtcct cgccctcact 180
ccttgaggag atccacctgc aacctcgggt cctcagacca accagcccaa ggaacatctc 240
atgaatttca aattggcagc tgaagactga tgctgcccga ttgccttgga agcccccccta 300
gaccatcaca gatgccgagc ttcggt 326

<210> 2003
<211> 387
<212> DNA
<213> Homo sapiens

<400> 2003
cgttgctgtc ggtttttaaa ggcaacatag cattctacag cagggttaat ctattatcaa 60
gaacagtcac cctggttaat aacaagtttt actgatcagt tgctggttgg ttggttggtt 120
ggcatgtggg tgtgtgggtg tataggtgtg tgtgggtgtg tgtgtctatt ttaccccaca 180
cgtaccttta tttaatgaag agggatggta actatatcat aagtctcacc atgacctgtt 240
ataaatttct gatggaagct cgcgcagtat gggcctttga aataccctgc tgatgtcata 300
ggtcatattc tcacatgaga actggaccaa agggcttggg ctgaaactct gatgttgcca 360
ctgtttgcca ccttcaattg gctgccc 387

<210> 2004
<211> 339
<212> DNA
<213> Homo sapiens

<400> 2004
ggaggatagg catgaaccac catgacctga tgaaagaaat ttttttaaac caaactgttt 60
tacccaaaat tttaatccag agctttcatt agatgacata tcagagaaaa taaagttgag 120
ccatataaac atgtctcttt tagccagaaa tataatttag attcaatact cttttataaa 180
ctgaggtttt attactatct atctcattac tgaagtccta aattaaagca ataagatctt 240
tgtgtgtgta tatatgttgg atgtgttgac acataagtac atatgttatg ttgtatgact 300
tgtctatata gtaaattttg gcatagttgg ccagaaatg 339

<210> 2005
<211> 343
<212> DNA
<213> Homo sapiens

<400> 2005
cacttcgggc tcccaaagtg ctgggattac aggtgtgaac caccgcaacc gacttaacct 60
cttttcatta taaattaccg agtctcaggt atttatctat agccgtgcat taacacagtg 120
tctggctctg tcacccaggg agaagacagt gatgagatca tagctcacca ctatggcctt 180
gacctcctgc actcaagtga ttctcccacc ttagcctccc aagacctggg atgacaggtg 240
cccactgcac aactgggtaa attctttttt ctatttaaac agcaggggtt tactatgaga 300
cccagcctcg tctgcaactc tggggtcaag taatcatacc gcg 343

<210> 2006
<211> 329
<212> DNA
<213> Homo sapiens

<400> 2006
tattcctaga caaaaacctt actattataa atatgtcaat tctaaacaaa ttgattgata 60
aattaaatat aatgtcaatc aaaatcctaa cagacttttt tgaaactcaa caagcggatt 120
ctaaaatgtg tatggaaagg cagaaagaca agaatagcca aggcactctt aaaaaagaag 180
aacaggctgg gcatggtggc tcacacctgt aatcctagta ccttgggagg ccaaagtggg 240
aagatagctt gaggccaaga atttgagata agcctaggca agacagtgag actctgtttc 300

cacaaaaatt taaaaactag ccgggcatg 329

<210> 2007
<211> 332
<212> DNA
<213> Homo sapiens

<400> 2007
aattcacaca cacccaagca gacacacact acaaaatata catgcacata tgtaatagaa 60
aaccctgtct tacatattat taattcccca aatttgtgaa aagacagttt tttaattgtg 120
aataattcag agttgttctt atggacaagt ccatgaaaat tgcttctact ttttgttaac 180
tttcatcagc ttttcatttc tgctcttaat tttctatggt cttaaaaaat acataaataa 240
accacttcaa attgtttcca aacaggctgg gagaggtggc tcacaccagt aatcccagta 300
ctttggaagg ccaagacagg tggatcatct gg 332

<210> 2008
<211> 354
<212> DNA
<213> Homo sapiens

<400> 2008
ccctctgaag acttggagtt ctggatgggc ctgagggtgg gggaggcctg ttagaagatt 60
ttatttttt cgttttcctt tttccttttt gtgcagaacg gagtcgcact aagttgccca 120
ggccggtctc caactcctgg gctcaagtga ccctcccgcc tcagcttcct gaagtgctag 180
gaagtgagct atgatcgtgc cactccattc tggcctgggt gacagagtga gacccctgtg 240
tctattttaa aaaggaagct agtggctgag caccgtggct tacgcctggg atcccagcat 300
tttggcgagg tggggcgaaa gcatcatttg aggtttggga ccattcctgc cccc 354

<210> 2009
<211> 163
<212> DNA
<213> Homo sapiens

<400> 2009
cccaggaggg ttggccggac acagtggtag tggctcacac ctgtaatcct aatgctttgg 60
gagcctgagg cgggaggacc ccttgagccc aagaagtcaa ggccacaatg ggctatgatg 120
gtgccactgg tcttcgggct gggcagcaaa acaaaaccct ggc 163

<210> 2010
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2010
ggcacgaggc cagtcaggat ggtttgctcc agcacctgct accgggcaga gacaaacacg 60
ggacaggaac cccgggggct gtatcgagta caccacttca ccaaggtgga gatgtttggg 120
gtgacaggcc ctgggctgga gcagagctca cagctgctgg aggagttcct gtcccttcag 180
atggagatct tgacagagct gggcttgcac ttccgggtcc tggatatgcc cacccaagaa 240
ctgggcctcc ccgcctaccg caagtttgac attgaggcct ggatgccagg ccgaggccgc 300
tttggagagg tcaccagtgc ttccaactgc acagacttcc agagccgccg cctccacatc 360
atgttccaga ccgaggctgg ggagctgcag tt 392

<210> 2011
<211> 399
<212> DNA
<213> Homo sapiens

<400> 2011
cgttggctgt cgcagcccat tcatgtccac cgaagtctta tcgtactaca ctactccatg 60
tcatcgcatc ccaccaggca tgccaacgca ttcatccagg cgaccaccca ggcatgtacc 120
cactcaccta tccacccatc cacctaccta tttgtcaccc atccacccat ccatccatcc 180
aatcacccat ccaaccatca atccaaccat tttcatctga tcattttcga tccatctacc 240
cgtccaccca ttcactactc catccaccta cctatccatt tatcagccat ttacccatcc 300
atccatctat ccatgcagat gtttattgag cacctgtgtg ctgggtccta tttgggagcc 360
ttgttaacca ccaagacctt cctaggccat attgtggta 399

<210> 2012
<211> 359
<212> DNA
<213> Homo sapiens

<400> 2012
actacgactg cgacatgacg acagacaggg acgctgttag ccacaccctc actcataagc 60
agtgccgaaa aggcttcatt cgagacctgt gggatggcat tgctttaatc atagccataa 120
tacactgcta taaaactgct ttccacctca cgcgcactcc ttttatgttt cagcttcgcg 180
gctaggcaac ttaagtcact tcctgtcttc cgcctcaggc tagagggcga gcgcttcgcc 240
gtgggacttc ttctgcctgg ctccgcctct tgccccggaa gtactcacag cgtacggttg 300
gtattgggcc cgtttctgag cagcgcttcc tttttgtccg acatcttgac gaggctgag 359

<210> 2013
<211> 344
<212> DNA
<213> Homo sapiens

<400> 2013
aggctgcagt gagctatgat catggtactc cattctggcc tgggtgacag agtgagaccc 60
tgtctgtaat aaagcaaaca aacaaaaacc cttgaacagg aaaagctata ataaaataaa 120
tggaagtaaa caatgatcaa tgccaggcac ggtggctcag gcctataatc ccagcacttt 180
gggaagccaa ggcaggagga tcgcttgggt ccaggagttc cagactagcc tgagcagcac 240
agcaaaaatc tctaccaaaa aaaaaaaacc ccagcccggg ttaaggggtt aacccttgaa 300
atccaaccat ttggggaggt tgaggcgggg ggaaaaccgg agga 344

<210> 2014
<211> 341
<212> DNA
<213> Homo sapiens

<400> 2014
gtctgacagc ctaggtttaa ttataatcaa taatctatca tcattaaact gttaataatt 60
atgtaagatt tttggctctc acataagtta aactggcctg actagcaaat gcatgtaagt 120
ttttttaata tatatataac tcagggcttc gcttttaatt ctaaataagt cattatggaa 180
ataaaatcta tttatttagt agatcaagat aatattctca gttgggcatg gtggcacatc 240
tataatctca actactcagg aggcaggtgg gaggactgtt ggagcccagg agttcaagac 300
cagactaggc aacatagtga ggccctgtct cattaaaaag a 341

<210> 2015
<211> 342
<212> DNA
<213> Homo sapiens

<400> 2015
atcattagat tggagagccg ccaaacacct aaactatatg aagctaaagt ctgtttaaga 60
aagagcccat ccaggctggg tgtggtggct catgcctgtg atcccagaac tttgggggggc 120
caaggtgggt ggatcatgag gtcaggagat cgagaccatc ctggctagca tggtgaagcc 180

ccgtctctac taaaaatacg aaaaaataat tggccgggcg tggtggcggg ttcctgtggt 240
cccagctact caggaggctg aggcaggaga atggcatgaa cccaggaggt ggagcttgca 300
gtgagccgcg attgcgccac tgcactccag cctgggcgac ag 342

<210> 2016
<211> 340
<212> DNA
<213> Homo sapiens

<400> 2016
agcctgggca acagagtaag actctgtctc aaaaaaaaat aaaaaaaaaa aaagggaaag 60
aaaaacccca attgataaat ttaccaaaaa aggacattaa ccggatttta ctttacttat 120
ggccaaaagg gaaaaaaaaa acataggctt taagggaaaa cttgattgtt gtaaaaaaaa 180
ttaaaaaaag gccaaataaa acttttaggg ataaacccgg ccgggggggg cccatccctg 240
aagccccacc tatttgggag gctaggcgga aaaattgttt aaacccagga gggggggtt 300
acaaagagcg gggatcggcc cattgcactc caccctggca 340

<210> 2017
<211> 275
<212> DNA
<213> Homo sapiens

<400> 2017
ggcagaaatc aaaagcaccg accagatagg aaaaaaacag acaaattaga cttcaacaaa 60
actaaacatt cgtgctcctc aagaggaact tttaggccag gcgcagtggc tcatgactgt 120
aatcctagca ctttaggagg ccgggggcggg tggatcacga ggtcaggagt tcaagaccag 180
cctggccaag atggtgaaac cctttctcta ctaaaaatac aaaaattagc cgggcccagc 240
tgggtgcggt ggctcacacc tgtaatcctt gcact 275

<210> 2018
<211> 316
<212> DNA
<213> Homo sapiens

<400> 2018
agggtttatc acatgggtag actcaagtac ccatgtgata aaatgtcaca gaactatata 60
ccaaaacaaa tagacaaaaa gagtgcacgt atatcctggc gaaatccaaa taatatctgc 120
acctgagtta acagtattat tgcatcacag tcacttttct ggctttggcc atttactatg 180
gttatataac attattattg gaagaagtta gctaaagagt atatggggac tttatactat 240
aatttttgca actcttgtgt agtctctaac tgggtagtgt gaaatagttc tgccacctct 300
gacgcaccac tgtcaa 316

<210> 2019
<211> 312
<212> DNA
<213> Homo sapiens

<400> 2019
ttcatgaggg gctgatctgg ctttggggtg gtattaattg ttttttttt ccccttttt 60
tttaaaaggg gaactggcgg ggttgccaag gcgggtctca aactttgggg ctaaggggc 120
ctccccatcc cacctactcg gggggttgag ccaggaaaat ccttcgaccc cggaaggcaa 180
aggtggcaag ggcccacaat ggtcccacgg ccctccaccc tgggggacaa accaaaattc 240
cctctcacac aacgagagaa ggaaaactaa aggaaatccc ccggaaaccc ccgtgaaagg 300
ccggaaagcc cc 312

<210> 2020
<211> 329

<212> DNA
<213> Homo sapiens

<400> 2020
gcacgcacac acacacacac acacacacac acacacggta ttgaaactag aattctttca 60
atggtgtatt ccccatactt atttatgtct caaagactga tcttcaaaga agacagagac 120
ttccagtgta agacagttga aaatatttgg ctgtgaccag caacaaaagg caaacaagtg 180
tcaaaaaggt ctttgctatt gtaaggagat tctcttttac tgatctaaac aaaaggctct 240
tctcacttct ctatttccca tcctggcgca ttaaccattt atatttaatt aagcccttct 300
tatatttctc aaacagcagt atttatgct 329

<210> 2021
<211> 375
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(375)
<223> n = A,T,C or G

<400> 2021
gagaattgct tgaacccggg aggcagaggt ggcagtgagc cgagattgcg ccactgcact 60
ccagcctggg tgacagagca agactccatc tcanaaaaaa aaaaaaaaag aaaaaaaaaa 120
accccggccc cggaaactaa accctgaaac ccaagaattt ggggggggcg gggggggga 180
ataacaaggc ggggatttaa aaaccacccg gtttaagggg aaaccccatt tttaataaaa 240
aaaacaaaaa taagtggggg gggggggagg ccccctggat ccccaattcc tcggaaggct 300
ggggcaaaaa aatccttgaa ccccgggggg cgggggtttc agagacccaa aatggcccca 360
ttgaactcaa gtggg 375

<210> 2022
<211> 382
<212> DNA
<213> Homo sapiens

<400> 2022
cgttgctgtc ggtgaaccac cgcgcctggt tgagataggt tgtttttga attaactatt 60
ctttttttt ttttttttt tttggaaaaa aatttttttt ttttttcccc acctgggggg 120
caggggggca aagataaaag ttaattggaa cctttgcctc ccaggttaaa gggattcccc 180
ggctttaatt tcccaaggcg gggggattaa ggggaggggc ccttaccccc gggtgttttt 240
ttttttgggg gaaaaacggg gtttttcctt tggggcaagg gtggttttgg gttccccacc 300
cgggggggaat aacctttttt ggcccccccaa agggggggga atatagggggg gggccctggg 360
ccccaacctt ttttttaaaa tt 382

<210> 2023
<211> 349
<212> DNA
<213> Homo sapiens

<400> 2023
gcgcgcaggc tgcgcatgcg cgccggcgac cacacctaaa tagccgcagc ctctgcgcgt 60
cgccctccac ggttaccccg gctctccgcc cctccttctc gcgggggctcg agggaccatg 120
gccgatcctc gcgtgagaca gatcaagatc aagaccggcg tggtgaagcg gccggacaaa 180
gaatatttgc tgatgatttt ctaggcatac atgttgtgga atccattgta aaatggacct 240
tggtgccggg tgagtatagg aataaacccg gctgaaaaaa tacgtggctt aaaacatgtc 300
tgtttagttt agacgggtcg aatttcaata agctctttct ggggtctcc 349

<210> 2024
<211> 349
<212> DNA
<213> Homo sapiens

<400> 2024
actacttgct atgtatgttc ccctagctgc atttgaaccc ctgggttcaa gtgatcctcc 60
cacttcagcc tccccggtag ctgggactat aggtgcatgg caccgggcct ggctgttcac 120
tcctcctttc ataagcaaag gcacagtttc ttttcttgta agagatgggc taggttgtgt 180
agattgagct ttctaataaa aacaactaaa agtgttgaat aaaaatgtct taaaaacatc 240
gaaaagttaa cacggtagaa atgaaattgg gaactcagat aagctgaacg tggaaactgc 300
ttttgccttg cgaacatttg ctcaactaag tgaacttgaa ctttggttt 349

<210> 2025
<211> 352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(352)
<223> n = A,T,C or G

<400> 2025
actacttgct atgtatgttc ccctagctgc atttgaaccc ctgggttcaa gtgatcctcc 60
cacttcagcc tccccggtag ctgggactat aggtgcatgg caccgggcct ggctgttcac 120
tcctcctttc ataagcaaag gcacagtttc ttttcttgta agagatgggc taggttgtgt 180
agattgagct ttctaataaa aacaactaaa agtgttgaat aaaaatgtct tataaacatc 240
gaaaagttaa cacggtagaa atgaaattgg gaactcagat aagctgaacg tggaaactgc 300
ttttgccttg cgaacatttg ctcaactaag tgaacttgaa ctttgggttt gn 352

<210> 2026
<211> 346
<212> DNA
<213> Homo sapiens

<400> 2026
ggcactggag gaagataact caaaataaga ggcagctatg acaatcccac agcaaacatc 60
atactgaatg ggttaaagct ggaagcattc ctcctaagga ctgaaagaag acaagaatgt 120
tcactcacac catgcttatt caacatagca ctggaagtct tagccagaac aattagtcaa 180
agaaagaaat agacatccaa attggaaaaa aggaagtcaa attatctctc ttcactgacg 240
atatgattct atacctagaa atactaaaga ttctgccaaa tctcaggata caaggattag 300
cttacaaaag ttaatagcat ttccatacac caataactaa gctgag 346

<210> 2027
<211> 347
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(347)
<223> n = A,T,C or G

<400> 2027
gctcttcaag taaatactac tgatttgtca ccaaaggagg tcaactccaa ggaaagcttt 60
gcatttaaac cagaaaatat ctcagaagaa aatgcaaccc acatatttat tgccattaaa 120

agtatagata aaagcaattt gacatcaaaa gtatccaaca ttgcacaagt aactttgttt 180
atccctcaag caaatcctga tgacattgat cctacaccta ctcctactcc tactcctact 240
cctgataaaa gtcataattc tggagttaat atttctacgc tggtattgtc tgtgattggg 300
tctgttggaa ttgttaactt tattttaagt accaccattt gaacctn 347

<210> 2028
<211> 389
<212> DNA
<213> Homo sapiens

<400> 2028
cgttgctgtc ggtcggagag ccagcggact ctgacaagcg tcatgccagt gacttcgccc 60
tgtggaaggc ggacaaaccc caggaggtgt tctgggcctc tccctgggga cccgggaggc 120
cgggctggca catctagtgc tctgccatcg ctagtatggt atttggaagt caactggata 180
tccattcaag tgggatagat ttagcttttc cacatcatga gaacgaaatt gcacagtgcg 240
aagtctttca tcagcgcgag cagtggggaa attatttttct gcattctggg catttgcacg 300
ccaaaggcaa agaacaaaaa atgtgccaat cattaaagaa ctacgttact attaaggact 360
ttctgaagac cttttccccc gatgtctta 389

<210> 2029
<211> 189
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(189)
<223> n = A,T,C or G

<400> 2029
gacccactac ctaaaaaatc ccaaacatat aactgaactc ctcacaccca attggaccag 60
gnnggaagnn aaaagaaaaa ggaaaagggg gcggtttttt tcggaaaccc caacttggaa 120
aaaacctttg ggggggtggg cacaccccca ttttaagggg ggggaaaaaa ttttttttt 180
tgggaattg 189

<210> 2030
<211> 215
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(215)
<223> n = A,T,C or G

<400> 2030
tacggttgct agaggacgac ggatgggctg atgccaattt ttctgggaga gcccacttta 60
aaaccccctа taccagagga gctacctaag aacaggtttc nagagcacac cccgtctatg 120
tactcacaat agcggggaga atttataggt tgaggctgac aaaccttccc agcctggggg 180
atttctgggt ttgccaaaat agaactctta gttcn 215

<210> 2031
<211> 390
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(390)
<223> n = A,T,C or G

<400> 2031
cggtttataa aagccttggg ttccaaccag gcagtagatg tgcttctgaa ccgcaaggag 60
caaacactga aataaaatag tttatttttc acactcaaaa aaaaaaaaaa aaaacctccg 120
ggggccgttt tttccgtaaa cccaaacttg aaaaaaccct tggaggagtt gggccaaccc 180
ccacctaaag ggcggggaaa aaagggcttt tttggggaaa ttggggaggc tttggtttta 240
ttggaaccca ttataggcgg caaaaaacag gtaaccacca ccaatggctt tctttttatg 300
ttccgggttc gggggggggg gggggggtgt tanncccccc ccccccnccc ccccccnccc 360
ccccnccncc cnccaccccn cccccccccn 390

<210> 2032
<211> 394
<212> DNA
<213> Homo sapiens

<400> 2032
cgttgctgtc gcacggtttt gttttgttgc ccaggctgga gtgcaggggt gcaatcgaag 60
ctcactgcag cctcgaccac ctgggctcgg gtgatcctcc tgcctcagcc tcccagtatc 120
tgtggccaca agcacacccc accatgccca tttaattttt taagggattt cttgtacata 180
tggggtctca ctatgctgcc cacgctggac ttgaactcct ggccaccaag gggagctcct 240
atctcggact ccggaggggc tatgattacc cgtagataga catttacttt aggaagaggc 300
tcttaaaggc aataaaacgc ttcccatcca agagaatcac gctgcaatcc tgggccacag 360
agctttttaa aaaatcgatg cctgaccttc aacg 394

<210> 2033
<211> 404
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(404)
<223> n = A,T,C or G

<400> 2033
tacggctgct acaatatcac agaagggccg gtcttgaact gctgggctga agggatcagc 60
tggtcttggt ctcccaaaag gctggggtta caggcatgag ccatggtacc ccgccaagtg 120
aactattaat acacacaacc tggatacatc tcaagagaat tatgctgagt gaaaaaacag 180
acaacacaca tacggccacc taatttatga ctaagggata ctgcagccaa ctaaaggaag 240
ttatcttcaa taaatggtgc tgtgtcaact gaatatacat atagaagtat ataaatcttg 300
atttctactt cgtataaaca aaaaagatct aatttctaat tatagacctc ataaacttaa 360
ggaagaaaca ataaaactta tggaagaaaa catacgagaa tatn 404

<210> 2034
<211> 353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(353)
<223> n = A,T,C or G

<400> 2034

ctggatgtca gcaagaatgg aatacaggag tttccagaaa atataaaaaa ttgtaaagtt 60
ttgacaattg tggaggccag tgtaaaccct atttccaagt aagttctcag gctccctgat 120
ggatttctc agctgttaaa cctaacccag ttgtatctga atgatgcttt tcttgagttc 180
ttgccagcaa attttggcag attaactaaa ctccaaatat tagagcttag agaaaaccag 240
ttaaaaatgt tgcctaagta agtaaaggtg ctattcttta aaaaacttaa tttataattt 300
ttaatgatta agtctttana aatgtaaatt tttattacct anaatgtggt gcg 353

<210> 2035
<211> 367
<212> DNA
<213> Homo sapiens

<400> 2035
gtgcgtccgt cgattgagat ttgacgacag acagggtccc gtgtgttgct gccacagcta 60
cagttcagtg acaagaaagc tatatctgta atggctgtga tgcgattgct ttatttgttg 120
cctgtattct ctgcactttg cgaaccgacg ccgacagttg cattgatttc atgatttagg 180
taccgaccaa ggtgtgcgaa gttcaggact ctgtctctcc acccctcata taaaagaaaa 240
aaggaaaggc atgactctga gggtaattct aggaaggcat gtggggtggg aaaaggagcc 300
agcggtgtga ttaaagaatg acatggtact agagggatgc agatctagat aatattgaaa 360
ggccagg 367

<210> 2036
<211> 382
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(382)
<223> n = A,T,C or G

<400> 2036
tacggttgcg agaatacgac agaagggctg gatgtcagca agaatggaat acaggagttt 60
ccagaaaata taaaaaattg taaagttttg acaattgtgg aggccagtgt aaaccctatt 120
tccaagtaag ttctcaggct ccctgatgga ttttctcagc tgttaaacct aacccagttg 180
tatctgaatg atgcttttct tgagttcttg ccagcaaatt ttggcagatt aactaaactc 240
caaatattag agcttagaga aaaccagtta aaaatgttgc ctaagtaagt aaaggtgcta 300
ttctttaaaa aacttaattt ataatttta atgattaagt ctttaaaaat gtaaattttt 360
attacctana atgtggtgca an 382

<210> 2037
<211> 386
<212> DNA
<213> Homo sapiens

<400> 2037
cgttgctgtc gggaatgccc ttggcagcct gcccaaggaa gctgccaggc agaactatgt 60
ggatttggtg tccagtttga gtccttcatt ggaatcctct agtcaggtgg agcctggaac 120
agacaggaaa tcaactgggt ttgaaactct ggtggtgacc tccgaagatg gcatcacaaa 180
gatcatgttc aaccggccca aaaagaaaaa tgccataaac actgagatgt atcatgaaat 240
tatgcgtgca cttaaagctg ccagcaagca tgactcaatc atcactgttt taacaggaaa 300
tggtgactat tacagtagtg ggaatgatct gactaacttc actgatattc cccctggtgg 360
agtagaggag aaagctaaaa ataatg 386

<210> 2038
<211> 323
<212> DNA

<213> Homo sapiens

<400> 2038
aggtaactga atccaacaac atatcaaaaa gataatccat catgtgatca agtgggtttc 60
ataccaggga tgcagggatg gtttaacata cacaaatcaa taaatgtgac acaccacata 120
aacagaatta aaaacaaaaa tcacatgatc atctcaacag atgcagaaaa agcattcaac 180
aaatccagca tccctctatg attaaaactc tcagcaaaat tggcatacaa gggacatacc 240
tcaatgtaat aaaagccaac agccaacata atactgaata gggaaaagtt gaaaacattc 300
cctcttagaa cttgaacaag aca 323

<210> 2039
<211> 319
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(319)
<223> n = A,T,C or G

<400> 2039
gtatacctgg actttataga aagtattaaa cttgtatcta ttactttata aagcagggca 60
ctgaatatat tgagagagaa taccagctag aaactttaag aatataacat ctttttggaa 120
acaacaatgt ttatttaaac aattatttac catgaccaag tggtatttat cccaggaatg 180
caagggtggt tcaacacaag aaaatcaatt gatgaaatat atcacattaa tggaagaaaa 240
aacatatata tcatctcaac tgatgcaaaa aatatatttg acaaaattca gcactctatc 300
agaaaaacct ttagaaaan 319

<210> 2040
<211> 386
<212> DNA
<213> Homo sapiens

<400> 2040
cgttgctgtc ggcttcctaa ccatcgagat taccagcaat gtgcagtacc tgaaaagcag 60
gatattatga agaaactgaa ggagattgca ttcccaagga cagatgaatt gaaaaacgac 120
cttttaaaga aatataacgt agaataccaa gaatatttgc aaagcaaaaa caaatataaa 180
gctgaaattc tcaaaaaatt ggagcatcag agattgatag aggcagaaag gaagcggatt 240
gctcagatgc gccagcagca gctagaatcg gagcagtttc tgtttttcga agatcaactc 300
aagaagcaag agttagcccg aggtcaaatg cgaagtcagc aaacctcagg gctgtcagag 360
cagattgatg ggagcgcttt gtcctg 386

<210> 2041
<211> 359
<212> DNA
<213> Homo sapiens

<400> 2041
attctccgta ttcaccttct gtctctccag tttgggggca gctgtttgac ctgtgactta 60
acttctctta cagatctaag aaaagttgtt gatttttcag tttgtttagc tttttacttg 120
ctcttaagat tgagtgacag attttttttt gcattttttt attgcgataa aatgtattaa 180
tacaaaacat ttatcattta cgtgtacagt tctgtggcat tagatacatt cacactgtgc 240
aattaggact cttaaaagga aaaagtcaca tactgttaga agggtcatac aaggctttat 300
agaaaggatt tttaagatga gcttctatat atcaattagg agaacatttc agtagaact 359

<210> 2042
<211> 354

<212> DNA
<213> Homo sapiens

<400> 2042
atacaaaaaa ttagccaggg gtggtggtgc acacctggag tcccagctac tcaggaagct 60
gaggtgggag gatcacctga gcctggggag gtcaagactg cattgagcca tgatcctgcc 120
actgcactcc agcctgggtg acagagcaag actccatctc aaaaaaaaaa aagcaggtaa 180
aaaaaaattt tttttgtata aagccaaaaa tatataaaag ggcaaaaata ggcgggggag 240
gggggctacc cctgaaaccc caccattttg gaaggccagg gggggcaaat cacgaggccg 300
ggaaattgaa accatcctgg ttaacagggg gaaaccccgg ctttactaaa aaaa 354

<210> 2043
<211> 402
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(402)
<223> n = A,T,C or G

<400> 2043
ggcacgagag gggctggatg cctttcatcc caactattct ctgtggtatg aaaaagaaaa 60
aaaaaaaaaa aaagggatcc gggcccgggc gggggggttc acccctgtat tcccaccttt 120
ttggaaaacc aagtcgggca ttcttttgaa gtcgggagtt aaaaaccacc cggcccaact 180
ggggaaaagc ttgttttttt taaaaaaaca aaatttaccc ggccgggggg ggggcccccc 240
gtattcccag gtttttgggg ggactgaaac agaaaaatcc tttcaccccg gggggggggg 300
gttgcataaa ttcaaaaggg ccccccttggg ctccaccctg ggggacaaag cgaaactcct 360
tttaaaaaaa aaaagggatc ggccaaaaaa ccccccgggg tn 402

<210> 2044
<211> 331
<212> DNA
<213> Homo sapiens

<400> 2044
tgctggccac accagccccc tttcacctcc agtgccacaa taaacctgta cccagctgtg 60
tcttgtgtgc ccttcccctg tgcatccgga ggggcagaat ttgaggcacg tggcagggtg 120
gagagtaaga tggttttctt gggctggcca tctgggtggt cctcgtgatg cagacatggc 180
gggctcatgg ttagtggagg aggtacaggc gagaccccat gtgccaggcc cggtgcccac 240
agacatgagg ggagccactg gtctggcctg gcttggaggt tagagaaggg tagttaggaa 300
gggtagttag catggtggct catgcctgtg g 331

<210> 2045
<211> 313
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

<400> 2045
ttgtttgcag aataaacttc agtgttatac tcggcttaat catttgcatc aagtgtacca 60
agaataatta ttttcacata ggcttttaaa attggctctg atggaattct attccatacg 120
gaatctcaga taagactgtt ttttttgag ttggagtttt gctcttgtta cccaggcttg 180

agtgcagnnn cnnnnnnntn nnttantnnn nnctnnncct tnttnactca attgatcctc 240
ccacctcatc ctccccaata acttttacan cctttccata ccaccactcc tttttaattt 300
aaaaaaaaat ttt 313

<210> 2046
<211> 324
<212> DNA
<213> Homo sapiens

<400> 2046
aggctggtgt gcactggtgc gatctcggat cactgtaacc tctgcctcca gggttcaagc 60
aattctctgc ctcagcctcc cgaggagctg ggattatagg cgcccaccac catgccccgc 120
taacttttg tatttttagt atagatgggg cgtcaccatc ttgtccaggc cggtatagaa 180
cttctgtcct cctggggacc caaaatgggc tcctaaaaaa ggaggtttgg gacctgatgt 240
ccagggcttt ttgaaggtgt gggactgccg cgccccccct ccacccgggc cagtattttt 300
gtttaaaaat ataaacggtg cgcc 324

<210> 2047
<211> 398
<212> DNA
<213> Homo sapiens

<400> 2047
ggcgggatgg aggcggcggc cgagccttta tattttgtcc ggcgtcaggc acatcatcct 60
ggtcctgtca ggaaaggggg gcgttgggaa aagcaccatc tccacggagc tggccctggc 120
actgcgccat gcaggcaaga aggtgggaat cctggatgtg gacctgtgtg gccccagtat 180
cccccgcatg ctcggggcgc agggcagggc tgtgcaccag tgcgaccgcg gctgggcacc 240
cgtcttcctg gaccgggagc agagcatctc gctcatgtct gtgggcttcc tgctggagaa 300
gccggacgag gccgtggtgt ggagaggccc caagaaaaac gcgctgataa agcaggttgt 360
gtccgacgtg gcctgggggg agctggacta cctggtgg 398

<210> 2048
<211> 360
<212> DNA
<213> Homo sapiens

<400> 2048
actatcgatt gcgagacgac gacagacggg gatcagtctg ttcctaccac acttctgggg 60
ccataacgaa atggctgcat gagtgaagac tgtgatgcta tcgctctata ccaaaccatt 120
atgatctgca ataatctggt tagcaaccac agttgcgttc attttgtgtt ttatggtact 180
aggggtggcg tggaaagatc acgataacat ccagaattgg catctcttct ttacgtttag 240
atgaactaga ggagcgcgag catacacatt caaaagctag cagaaggcaa gaaataacta 300
aaatcagagc agaactgaag gaaatagaga cacaaaaaac ccttcaaaaa attaatgaat 360

<210> 2049
<211> 313
<212> DNA
<213> Homo sapiens

<400> 2049
ccaaagtgct gggattacag gtgtgagcaa ccacaccccg gcctcatgct ataacttttt 60
ttttttttt taaaaaaagc ctcactttgt acccaaggct gaaggggta ggggaataaa 120
gggggttaat tgaaaccttt gcctccgggg ttaaaggaat tttccggcct aaccctcctg 180
agaagctgga actacagggg cctgccacca acccgggtta atttttttgt tttttaagaa 240
aaaacggggt ttaaccacgt gtggaaggcg ggtttcaaac aactgacctc aggggatcca 300
cccacctggg cct 313

<210> 2050
<211> 352
<212> DNA
<213> Homo sapiens

<400> 2050
actgtggatc tgtccccagg tttggctggg ggtttggttt ttagtagaga tgaggtctca 60
ctatgttctc aaactcctgg gctcaagtga tcctcccacc ttggcccccc aaagtgctag 120
gattataggt gtgagccact gcatttgggc gccgtgaaaa gctttgagaa ggctaacgga 180
aaagcaaggg agagccctgg gcacacagcc ccctcgagga ggcaggtagg gccccacctc 240
acggtgtggg tcacagagct ttactccctg catttccagc catgaggggt tgggggccat 300
ccacccatca gatactggtt aggaaggtga tcacggctca gtgcaaggga ct 352

<210> 2051
<211> 352
<212> DNA
<213> Homo sapiens

<400> 2051
actgtggatc tgtccccagg tttggctggg ggtttggttt ttagtagaga tgaggtctca 60
ctatgttctc aaactcctgg gctcaagtga tcctcccacc ttggcccccc aaagtgctag 120
gattataggt gtgagccact gcatttgggc gccgtgaaaa gctttgagaa ggctaacgga 180
aaagcaaggg agagccctgg gcacacagcc ccctcgagga ggcaggtagg gccccacctc 240
acggtgtggg tcacagagct ttactccctg catttccagc catgtgggtt tgggggccat 300
ccacccatca gatactggtt aggaaggtga tcagggctca gtgcaaggga ag 352

<210> 2052
<211> 275
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(275)
<223> n = A,T,C or G

<400> 2052
ctcatcatgg taaagacttt atatgaaaaa ttcacagcta acatcacatt caattatgaa 60
atgatgaaag catttccccc aagattaata acagggcaag ggtgtctact atcctcactt 120
atatttaaca taatattgaa agttctagcc agagaaattg ggcaaaaaaa aaaaaaaaaa 180
aaaattgggg gggggttttt tcggaaaatc cagcctggaa aaaatccttg gggggtgtgg 240
gccccccccc cttaggaggg ggggaaaaaa gggtn 275

<210> 2053
<211> 384
<212> DNA
<213> Homo sapiens

<400> 2053
gaagacttac ttaccctaag tatatatgca cccaacattg gagctcccag gtttataaaa 60
caattacttc taaacccagg aagagactta gtcacacaac aacagtgagg aacttcaata 120
ccccactgac agcattagac agatcatcaa gttataaaac taacaaagaa attctggact 180
taaaaattga acacttaacc aataggactt tataaatata taaagaatat tccacccaac 240
aaccacagaa tataaattat tcttatctgc acatgaaacg tactctaaga tcaaccacat 300
attcattcat aaaaaagcct caataaattc aaaaaaattg aaatttaac aagcatattc 360
tccaaccaca ggggaattaa aata 384

<210> 2054
<211> 332
<212> DNA
<213> Homo sapiens

<400> 2054
tgtgtggtgg cggcaccgct cacaaacacc cccactccgg ccgcccgaca gtctgaacag 60
ctcagagttg aaccggcagc gtcgggcacg ctggttgcag gagcaggcta ggagcaaaat 120
ggggtggggg cgcatcaggg ccgagtgtgc tgctccccag tcctcagctt tcttcccatg 180
gccctgccct catgaaagga agccgtgagt gtccaaggta gaagagaatg cctgggtccc 240
aggacacctc tattattatc ttttttttcg agacggagac tcactctgtc acccaggctg 300
gagccgaata ttttttgcc aattctgtca cg 332

<210> 2055
<211> 387
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(387)
<223> n = A,T,C or G

<400> 2055
cgttgctgtc ggtctgatgt tggcctaggg aagggacggt actacagtgt aaatgtgccc 60
attcaggatg gcatacaaga tgaaaaatat taccagatct gtgaaagtgt actaaaggaa 120
gtataccaag cctttaatcc caaagcagtg gtcttacagc tgggagctga cacaatagct 180
ggggatccca tgtgctcctt taacatgact ccagtgggaa ttggcaagtg tcttaagtac 240
atccttcaat ggcagttggc aacactcatt ttgggaggag gaggctataa ccttgccaac 300
acggctcgat gctggacata cttgaccggg gtcatcctag ggaaaacact atcctctgag 360
atcccagatc atgagttttt cacagcn 387

<210> 2056
<211> 381
<212> DNA
<213> Homo sapiens

<400> 2056
tgggacaaca ggggctcacc accacaccca gctagttttt tctgtagttt tattagagaa 60
gtggttttat cgtgtaggcc agggggggtct caaacttctg gtctcaggtg atccacccat 120
ctcagccttc caaagtactt ggattacagg agtggccacc acgcccaacc tacacatagc 180
tctttttttt ttttttttc aagaaaaaaa tttttttttg tcccccaggt gcaggaagat 240
ggtttttttg ggtacaccag aatctttttt tccagggttt aagccagtat ggaggccgat 300
atctttgggt gcgcggggta tacacacgaa ctgtccaaac ccggtgtgat tgttggtctt 360
acaaaagatg ctggagcata t 381

<210> 2057
<211> 399
<212> DNA
<213> Homo sapiens

<400> 2057
cgttgctgtc gacggttttc ctgccttagt ctccctagac gctgagactg ccggcatgtg 60
ccaccacgtc cagctaatac tttgcgcttc tagaagacat ggggttactc cctgtatttg 120
aggctggtct gagagctcct gacctatttg gaccagtcca cctctgcctc ccaaagggct 180
cggaaacaag cgtcgatcct tctatgcctg accgacaacc ttatgtctta gcctgagttc 240
ctcagcctta atgtgagatc ctcaaactgt tgacatacta attaatatgt atctactgag 300

actgagaaag acactaattt ctttctaaat catgaagatt tactgattat cttatatgta 360
aaacatttta gcctatatgt tggaatctgg agccaatga 399

<210> 2058
<211> 335
<212> DNA
<213> Homo sapiens

<400> 2058
tggaaccagc aaagcatgaa aggtttaaga cacttcatca gttgggtttt cttgccttga 60
aaaaggggga atagaaaatg atttggtaag cactccctct ttcacttcct ttggaaggga 120
ttgggcaaaa taagtattat ttcctcctca tatacgtaga attagttttt ttggtttttt 180
gtttgtttgt ttttgagaca gagtttttga gactctgtca cccaggtggg agtgcaaggt 240
cgcgatcttt gctcactggt ttctctgcct cccaggtaca agcgattttt ctgtcttatc 300
cccctgagta tctatgaatg atatttgtct gcccc 335

<210> 2059
<211> 336
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(336)
<223> n = A,T,C or G

<400> 2059
ggattcctta aaccttgagc cttggaggtt gaggctgaag tgagccaaga tcacaccact 60
gcattccatc ctatgtgaca gagtgagaca ctgtctccaa aaataaaata aagatttaat 120
caaaataaaa tatggtacat aaaaatcaag gaagaccatg tggccatata aaaacacaaa 180
gccaggcact gtggctcatg cctataatcc caacactttg ggaggctgac gcagatggat 240
tacttgagat caggagttca agaccagcct ggccaatata ctaaaacccc gtgtctacta 300
aaaatacaaa aaatcagctg ggcgtcgtgg caagtn 336

<210> 2060
<211> 172
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(172)
<223> n = A,T,C or G

<400> 2060
cgttgctgtc gggcttggct tcagtgaacg caccgtgatg tgcaggccgg gaggtatagg 60
caggctgatg ggggaggtgt gggaggtttt tcnacacctn gcaccaaatg ctttatctac 120
tgaagctgcg atgctctagc tatattcaac accattattc gttacattat at 172

<210> 2061
<211> 322
<212> DNA
<213> Homo sapiens

<400> 2061
gggcaatctt ttcggattct cttccatgct gtggcaggtg agcctcatcc aatttgtgaa 60
agcctgaata gaacaaaagt ctgaccctcc gctgagtaag agagaattct tcctgcctga 120

atgccttcac actgagatat gggtttttgt cctgttttca gagtagaacc aaaacattgg 180
ctcttcctgg accttcaacc taccagcttt tgaactgaac ctacaccatt ggctctcctg 240
gttctcatgc cttcaaattc agactgccaa tatcatactg aatgggcaaa agctggaagc 300
attccctttg aaaaccaaca ca 322

<210> 2062
<211> 295
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(295)
<223> n = A,T,C or G

<400> 2062
gctttgcatc tgaaactgtc agccccagaa tgttgacagc cgctctccta gcccttctct 60
gtgcctcagc ctctggcaat gccattcagg ccaggtcttc ctcctatagt ggagagtatg 120
gaagaggnac ntaanctctt gggagctcta tggccctgcc cattggctga caaacccaca 180
tatgtatcca ggtgacctta aggcaagctt gtatcagctg atgatctctt aaaagtgcta 240
ccttctggct ggaggataac caacaactag cacaaccagc atttcgagaa aaccc 295

<210> 2063
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 2063
gggcaatctt ttcggattct cttccatgct gtggcaggtg agcctcatcc aatttgtgaa 60
agcctgaata gaacaaaagt ctgaccctcc gctgagtaag agagaattct tcctgcctga 120
atgccttcac actgagatat gggtttttgt cctgttttca gagtagaacc aaaacattgg 180
ctcttcctgg accttcaacc taccagcttt tgaactgaac ctacaccatt ggctctcctg 240
gttctcatgc cttcaaattc agactgccaa tatcatactg aatgggcaaa agctggaagc 300
attccctttg aaaaccn 317

<210> 2064
<211> 374
<212> DNA
<213> Homo sapiens

<400> 2064
actcagcgtg gtgtcacgtg cctggaatcc caactactcc ggagggtgag gcacaagact 60
cgcttaaacc tgggaggcag aggttgcgtg agccgagaac atgccactgc actccagcct 120
gggcaagaga gtgagactct gtctcaaaaa aaaagtttat atttatatac acacatatat 180
ttatatactc acacacacac gtgcacacac ttaaaaatgc caagaaaaaa attgtaccaa 240
acaatcatga tctgaatcat gaagcaaatt aaaatgtggc atgattttga acaagtgatg 300
gagaatacaa aaagatttga ttgtgtaaca gggttatgat ttgagattgg ggaggaaaaa 360
aaacataatc cctg 374

<210> 2065
<211> 324
<212> DNA

<213> Homo sapiens

<400> 2065
aatcccaaca ctgggcagct gaggtgggtg gatcacttga gcccagaagg tcgagagacc 60
agcctaggca acatggtgaa accccgtctc tactaaaaat tcaacaataa aaaaattagc 120
tgggcgtggt ggcaaggacc tgtggtccca gctactcttg ggggctgagg cgggaggatc 180
aattgagcct gggaggtcga ggctgtggtg agtggtgacc acaccacttc actccagccg 240
gggtgacaaa acaagaaaac ctgtcacctt tctgggggac cctggtttcc ctggggtaat 300
tcaaaaaatc ttcccaaaag ggag 324

<210> 2066
<211> 394
<212> DNA
<213> Homo sapiens

<400> 2066
cgttgctgtc ggaaaacaag gggttagatg ttgcatttca taaaactaac cgaagttctg 60
tctactgatg cagcacaaga gatgtaaaaa aaaaaaaaaa aaaacccccc ccccgggga 120
aaaacccttt taaggtttgg tttggttttt tttttggggt tgggtttttg gttttttac 180
cccagggaaa aacctggaaa aggggcaaaa ccccttccg ggtttttttt ttaagggccc 240
ttttctaaaa aatagggtca accgggaatg gaaaaagggg gggggggggg gaaaaaaaaa 300
aaaccttggg ggttaggggt ttaaaaaaaa tttaggccca ttggttaaaa aaaccgcaac 360
tttaaaaaaa aaaaaatccc ccccccaacc aacc 394

<210> 2067
<211> 289
<212> DNA
<213> Homo sapiens

<400> 2067
tgctaaaagt acattgaaga tagattgccc catccaacct cctacatcaa gggtaaacaa 60
actctttctg tacgggccag atggtaagta tttggggctt tgtgggccat atagtttctg 120
ttagatctac tcagtgctgc cattgtagtg caaaagcagc cacagacaat atgtaaacaa 180
ttgaatgtgg ctgttttcca ataaagtgtt atttacacaa ccagatttta ccggtgggtt 240
atagtttggt gaatcatgtc ctagatcatc attaggaagt ggcatggtg 289

<210> 2068
<211> 339
<212> DNA
<213> Homo sapiens

<400> 2068
gtgggttttg tcattacttt caacgggaaa attgcaatta cttttgtacc aacttatcat 60
atgaaaaaca tatttttaat atcttaaaaa cttgagcctg ccatacaaaa ttgtgtgtgt 120
gtgttgtgtg tgtgtgtgtg tgtgcgtgag tgtgacttaa gatcatgatt ttattaccac 180
actgggcatc attgttaagc cccatcttca ctaacagtac acaattagcc ccgtgtagag 240
gtggctgcca gaaatcccat cctactaagg aggttgagtg aagagaatca cttgaacctg 300
ggatgcaaat gaaacagtga gtctagatcg tgcgactgg 339

<210> 2069
<211> 326
<212> DNA
<213> Homo sapiens

<400> 2069
tatttgtata atcgctgata actttccttg ctttcaagtc tgccccaact gaaatgaata 60
caggtactcc tgctttcttt tgattagggt tagcatggta catctttcct cacccattta 120

ttttttcatct atatgggttt ttatatttaa aatgagttcc atctcttcat gataaaaact 180
gacaacaaac taggcatcaa agaaatatat ctgaaaataa taagagccat ctatgacaaa 240
cccacagcca aacccacatc atactgaaca ggcaaaagct ggaaccattc tccttgagaa 300
ctggaacaag acaaggatgt gtattc 326

<210> 2070
<211> 132
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(132)
<223> n = A,T,C or G

<400> 2070
cgacagaagg gtaaatggga ttacttttat ttctttttca gattgtccac ctttggtata 60
tataaatgcc actgattttt gtatgtcaat tttgtatcct gtaactttac tgaatttatc 120
agttccaata gn 132

<210> 2071
<211> 183
<212> DNA
<213> Homo sapiens

<400> 2071
gctaacaaaa cacgtacagg atctctatgc taaaaattac aaaacgttga tgaaaggact 60
aaaagaaaac ctaaagaaat ggagagggat actatgttca tgttttgaaa gactcaatgt 120
agtaaagata cagattttcc ctaaaccaac ttataggttt aattcaatac ttatcaaaat 180
ctg 183

<210> 2072
<211> 376
<212> DNA
<213> Homo sapiens

<400> 2072
gcgggcggat cacctgaggt caggagttca agtccagcct cgccaacgtg gtgaaacccc 60
atgtctacta aaaatacaaa aaaaattagc cagacatggt ggcgggcacc tgtaatccta 120
gctacccgga aggctgagac gggaatcact tgaacctgtg aagcagaggt ttcagtgagt 180
ctagattgca ccattgcact ctagcctggg caacagaact agaccccatc ttaaaaaaaa 240
aaaaaaggtg atccccaaaa aaggggcttt ttctaaatct tagtggaaag gccaccatga 300
ttaaagtata caaacttttt gaagcaaatt aaatttttat ttcttttaat ccaaagttta 360
aatttgaatt aaaccc 376

<210> 2073
<211> 438
<212> DNA
<213> Homo sapiens

<400> 2073
tctcttttg aggatcccat cgcctctaat tccgttgctg tcgggcacac acctgtagtt 60
tcagtttctc aggaggctga cgcgggagga ttggcttagc ctgtgaggtg gaggccacag 120
tgagctgtga ttgcgccact gtactccacc ttgggagaca gagtgagacc ctgtctgaac 180
aacaaaaaag aattgtggcc agtcatggta gctcacatct gtaatcccaa cactttggga 240
agctggggcg agtggattgc ttgtggttac gaggtcagga tcagcctagg caacatagca 300
aaaccttgtc tctctaccaa caagaaaaag aaaaagaaaa aaaattaacc aagtgtgatg 360

gagcacacct ggtggaaagc cctaactact cggggaggct tatctgggag gaataattgg 420
agccccagag gttttggg 438

<210> 2074
<211> 376
<212> DNA
<213> Homo sapiens

<400> 2074
tacggctgtt agaatacgac agaagggagc accttgggag gccagaggca ggaggatcac 60
ttgaggccag gagttcaaga ccggcctggg caacataatg agaacccatc tttaccaaaa 120
aaataaaatt acattaaaaa ttagctgggc acggtgacgt ctgcctgagg tcacattcaa 180
gaagctgatg tgggaggatc gcttgagccc aggaattgga ggctgcagtg agctaagatc 240
ataccactgc acttcagcct gggcgtcaga gtgagaccct gtttctaaaa taataataat 300
tttaaaaaat gatatttatg gttgcattgg gaaaagatca atctattaat atatgtgaag 360
acatttttgg cctaaa 376

<210> 2075
<211> 367
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(367)
<223> n = A,T,C or G

<400> 2075
tacctacttc gattgcgaca tgacaacata cagtggtgtg tttacccaag ccacgactta 60
aaggcagagg acaagatgct atatttgtga aatgagacat gctatggctt tattagatac 120
cgtactctgc tgcaagacca caatgtacgc atcgacggtg gccttcattt tatgttgcag 180
aatgaatccg acgtatagga agtctttcan gatattatcc aggagaactt ccccaaccta 240
gcaaggcagg ccaacattca aattcaggaa ataaagagaa caccacaaag atactccttg 300
agaagagcaa ctccaagaca cacaattgtc agatttacca aggttgaaat gaaggacaaa 360
atgttaa 367

<210> 2076
<211> 331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 2076
ggtaccacta gaaaaatcca ccaaattaa taagagaaaa agaaacaaag aatacataaa 60
gcaagaaaac aaccatacga cagaaacaaa cctgtcatat aatcgcctca aatgcaaata 120
ggttaaatgc tccagaaaca gaacggctga atatatttta aaaacatgat ccaactaaat 180
gctgcttacg agaaactagc cttgtcagta aagacacata tgaaccgaaa ttaaagggat 240
ggaaaaaaat attttgtaca aattggaaac caaaagtgac cagaagctac agttatatca 300
gataaaatag actttaagtc aagaaaggta n 331

<210> 2077
<211> 135
<212> DNA

<213> Homo sapiens

<400> 2077
aggcgctggt taaaagaggc ctaaccccag gctttagatt tacagtccag agcttcactc 60
atccatttta cctgaccccc aaggtttttt tgggaaaatt gggggggcggg gggccttttt 120
ttagcgaaaa ccagg 135

<210> 2078
<211> 305
<212> DNA
<213> Homo sapiens

<400> 2078
taaccaatag gccaaagaag aaataacaag agaaattaga aaacacttag agttaaatta 60
aaatggaaag acaacttacc caaacttaca ggatatagtt aagcagtgct caacaggaaa 120
tttatagctg taagtgttta cattaaaaaa gaaacatctc aaatcaataa cctaaattta 180
catcttaagt aactagaaaa agaaggcaat actaaacccc aaaccagaaa gaagtaaata 240
aagattaaag ttaagataaa taacatagag aatagaaaaa ttagagagaa tcagcaaaac 300
ccaag 305

<210> 2079
<211> 339
<212> DNA
<213> Homo sapiens

<400> 2079
gtctcgctct attgcccagg ctggagtgcg gtggcactat ctcagctcac tgcaacctct 60
gcctgctggg ttcaagcaat tttcgtgcct cattctccca ggtagctgag attacagatg 120
tgggccacca caccaggcta atttttgtat ttttactaga gacgggggga tacagggctg 180
gcccgactca cactgagctg taagactaca ggccgggatc caaggtgaac tacaaggagg 240
tggtggaagc tcgaaccact cgataaacac caccttgtc ggtagtgggc attgtgctct 300
cttggaaacc cttgatggct cccaccttca aactgcttc 339

<210> 2080
<211> 343
<212> DNA
<213> Homo sapiens

<400> 2080
aacaacctaa cataaaaact acaggaagta gaaaagaaag agcaaaccaa actcaaagct 60
agcaaaagac aataaataac caaaattgga gaagaagtga atgaaattga aacacaataa 120
aattacaaaa cagatgaatc taatggtggt tatttgaaag attagataag attgataaac 180
ttctagctat actaatgaaa aaaagagaga agatttaaat aaacacaatc agtaatggca 240
aaggggacat tatcactgac cccacaaaaa cacagaaaac cctcagagac tactacaaac 300
acctctatgc acacaatgta gagaaccttc aagagatgga tag 343

<210> 2081
<211> 381
<212> DNA
<213> Homo sapiens

<400> 2081
aatcccaaca ctgggcagct gaggtgggtg gatcacttga gcccagaagg tcgagagacc 60
agcctaggca acatggtgaa accccgtctc tactaaaaat tcaacaataa aaaaattagc 120
tgggcgtggt ggcaaggacc tgtggtccca gctactcttg ggggctgagg cgggaggatc 180
aattgagcct gggaggtcga ggctgtggtg agtggtgacc acaccacttc actccagccg 240
gggtgacaga gcaggagaac tgtcacctcc tggggaccct gtttccctcg ggtattcaaa 300

aatctcccaa agggaggcaa gcatgggcca cgcagaagaa ctctcagtaa ggactgctga 360
gtctcttcat atgagctgca g 381

<210> 2082
<211> 411
<212> DNA
<213> Homo sapiens

<400> 2082
ccaggaacag gtgacgtgtc tgatgttggc ctagggaagg gacggtacta cagtgtaaat 60
gtgcccattc aggatggcat acaagatgaa aaatattacc agatctgtga aagtgtacta 120
aaggaagtat accaagcctt taatcccaaa gcagtggtct tacagctggg agctgacaca 180
atagctgggg atcccatgtg ctcctttaac atgactccag tgggaattgg caagtgtctt 240
aagtacatcc ttcaatggca gttggcaaca ctcattttgg gaggaggagg ctataacctt 300
gccaacacgg ctcgatgctg gacatacttg accggggtca tcctagggaa aacactatcc 360
tctgagatcc cagatcatga gtttttcaca gcatatggtc ctgattatgt g 411

<210> 2083
<211> 401
<212> DNA
<213> Homo sapiens

<400> 2083
cgttgctgtc ggcggtggca ttacctttgc agaccaaggc tgatgcaaat cgtactgccc 60
ctagtggaag tgaataccga catcctgggg cttctgaccg tccacagcct acagcgatga 120
attcaattgt catggagact ggcaatacca agaactctgc actgatggct aaaaaagccc 180
ctacaatgcc aaaaccccag tggcacccac cgtggaaact ctacagggtt atcagtgggc 240
atcttggctg ggttcgatgt attgctgtgg aacctggaaa tcagtggttt gttactggat 300
ctgctgacag aactataaag atctgggact tggctagtgg caaattaaaa ctgtcattga 360
ctgggcatat taagactttg cgggggggtg taattagccc g 401

<210> 2084
<211> 219
<212> DNA
<213> Homo sapiens

<400> 2084
ggactatgag aatcgaaccc atccctgaga atccaaaatt ctccgtgcca cctatcacac 60
cccatccgaa aaaaaaaaaa aaaaaaactt tgggggccgt tttttacgta aatccaaact 120
ggataaagac cttggaggag ttgggccaac ccccccttg aaggcgggga aaaaagggct 180
tatttggaga aattggggag gctatgggct taatttgga 219

<210> 2085
<211> 344
<212> DNA
<213> Homo sapiens

<400> 2085
ttatttcact atgatctgca attctgtttt aattaaatgt tttatacttt ttgacatatt 60
tggccagctt tctcaatgtc agagttctaa atgaagtctt ttcaacctag aattatcttt 120
gagattttct agttgggctc ctggagagcc tcaaacaatg tatttttcag cttgtagagc 180
tgttaaacta attaggcttg tttgatgtat tgagttgtat gagaagcgtt ggaggcacag 240
atgggatcaa ataacaaagt gacactaagt cttctctaag gtatatttat atggctatgt 300
tattgatgtg aaagatctaa aaattatgta aaatttataa atgg 344

<210> 2086
<211> 367

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(367)
<223> n = A,T,C or G

<400> 2086
ggtcttgaac tccagacctt gggtgatctg cccgcctctg cctcccaaaa tgctgagatt 60
acagacgtga gccactgtgc ccggccgcct gagacatttt gggcaacatc tgtgacagaa 120
gaaatgtgca tcctttccgg gcaggggatt taagaagcgg ctcatggctg aatatggtat 180
ctttgcatct gtctgtggaa ctgcgggagc atcttctggg ataagggact acctgtatga 240
gtcttgtaat gtgttctaac cacgcgcact cccctgtgct cccctatcac catgactatt 300
cacttgaaag cctgatgggc ctacgccctc ttctgtagcc tgtggaggcc caaaatgttt 360
cattgcn 367

<210> 2087
<211> 378
<212> DNA
<213> Homo sapiens

<400> 2087
gttctccaac catatggaat cataacagaa atcaaaacac aaagttaact ctctaaatac 60
atgaaaatta agcaacatac ttctagaaaa tccttggatc agagtcacac aaaagaaata 120
tatagcactg aattagaatg aaaataaaaa catacgaaca tatgtgggat ataactaaag 180
gattgctgag aagaaacctc atagcactag atgcttacat caaaatagag gaaggaattc 240
aaatcaataa ccaaaattct gacctaaaga acctagaaaa agaagagcac attaactcaa 300
agcaagcaca agtaataccg gtaataacag aagtcaatgc gaaagaaaaa cctgagagaa 360
aatgatacaa agtcaatt 378

<210> 2088
<211> 340
<212> DNA
<213> Homo sapiens

<400> 2088
tagcactcca ctcgcagtat gcacagatca tccaaacaaa aaaaaaaaat cagagttaaa 60
ctacccccta aacctagtgg gtctaactga catttataga acatttcacc caactgtggc 120
aaaaaacaaa ttcctttctt taaaacatga acattctcca gattaaacct tattttaaac 180
tacaaaacaa gtctcaaaga gttcaaagaa gtaaaaatca cctcaggtat cacttgggac 240
cacattgaaa taaaactaga aatcattacc caagcgaatc tcaaaagctt cataaacaca 300
tggaaattca acaacaggct tttgaacata ttaaggcaat 340

<210> 2089
<211> 337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(337)
<223> n = A,T,C or G

<400> 2089
ggtaccacta gaaaaatcca cccaaattaa taagagaaaa agaaacaaag aatacataaa 60
gcaagaaaac aaccatacga cagaaacaaa cctgtcatat aatcgcctca aatgcaaata 120

ggttaaatgc tccagaaaca gaacggctga atatatttta aaaacatgat ccaactaaat 180
gctgcttacg agaaactagc cttgtcagta aagacacata tgaaccgaaa ttaaagggat 240
ggaaaaaaat attttgtaca aattggaaac caaaagtgac cagaagctac agttatatca 300
gataaaatag actttaagtc aagaaaggta aaagacn 337

<210> 2090
<211> 365
<212> DNA
<213> Homo sapiens

<400> 2090
gtcacaagaa agggaagctt atccattaag gaaattgagc cccaaattag gaacgatcgg 60
gcaaataaaa ctccaggcct agatgacttc cctggggaat tccaccagac actgaaggaa 120
gaaaggatcc cagtcttaca tcaaatctcc cagagaagac agaaagcagg aacactgtct 180
aactcatgtt atgagtctag caaaacttta atgctaaatt ctgatgaaga cattacaaca 240
aagaaacatc atgggtcaac tcttcccatg aaaatggatg tgaaaatcct taaaaatatt 300
agcaagtcaa ataaaacaat atcacaacca agtgggattt atttcaaaat gcaaggttgg 360
gtgag 365

<210> 2091
<211> 335
<212> DNA
<213> Homo sapiens

<400> 2091
gtcagtgcgg tcacatactt ccagaagagc ggaccagggc tgctgccagc acctgccact 60
cagagcgcct ctgtcgctgg gacccttcag gtaggacagc tcccaatgct gtggggactc 120
tcagcaaaac ttctccttcc tttccacggc tctgcttctt ctgacctcat cttagttttg 180
ctttttcttt tcttccttcg ctatttttct atgatcctct aagaaccaag tccttgaaac 240
ttttggctca aagtggatac agagacaact ttttctagaa agttcagaaa agtgtatttt 300
gaggacggag tctggggaaa tcaatgggat ggggc 335

<210> 2092
<211> 129
<212> DNA
<213> Homo sapiens

<400> 2092
taccatctac tacggaggct gaagcaggag gatcacttga gctgggaggt cgaggctgca 60
gtgaactgtc atcgtgccac tgcatttcag cctgggtgac tgagcaaaat caaaaaaggg 120
ttgggcgtg 129

<210> 2093
<211> 328
<212> DNA
<213> Homo sapiens

<400> 2093
acgacagaag ggaatacatt taaccaaggc agtaaaagat ctctataagg agaacaacaa 60
aacactgctg agagaaatca tagatgacac aaatggaaaa atatttcata cacatagatt 120
aaaagaatca atatcattaa aatggccata ctgcccaaag caatttacag tttcaatgct 180
attcctatca aactaccaat gtcatttttc acagaactaa aaaagctatt ctaaaattca 240
cagggaatca aaaagaagcc caaatagcca aagcaatcat aagcaaaaag cacaaagctg 300
gagacatcaa attaccagac ttaaaact 328

<210> 2094
<211> 344

<212> DNA
<213> Homo sapiens

<400> 2094
tattctcctg cctcagcctc ccgagtagct gggattacag gtgccgacta ccacacccag 60
ctaatttttt gtatttttt ggtagagacg gtgtttcacc gtgttggccc cgctggtttc 120
attctctcga cttcaggcga ttcacctgcc tcggcctacc taagaggtgg cattactggc 180
tggatgctcc gcgcccggtc agaagcctct atttttaaaa agcccattag cttagacaac 240
gctttaccct tccttccatt tcccctaaga tcctgaggct ttgtcgaacc taatgaacat 300
catgggacca ttggatcggc ccttaagcct tttgggaaga catg 344

<210> 2095
<211> 309
<212> DNA
<213> Homo sapiens

<400> 2095
agtgctgtag ggcctcttct ccaaaagtct agattctgat aactccattc tcttcccttt 60
gttcccataa ccccagggag agtagctgct tcctaaagtc agtgtcccat ctttgctttg 120
tcaattctct aatatttatc aatttcctcg tattagatcc tctcttttaa aataccaagt 180
gtgaggaggc tgggtgcagt ggttcatgcc tataatccca gtatttggga ggctaaggcg 240
ggaggattac ttgagcctag gaattcaaga ccagtctggg caacatagtg agatctcgtg 300
tctaaaaat 309

<210> 2096
<211> 333
<212> DNA
<213> Homo sapiens

<400> 2096
tcaagcaatt ctcctgcctc agcctccaga gtagctgaga ttacagacat gcgccaccac 60
acccggctaa ttttttttt ttttttaag gggagacggg gcttttcctt gtggggcagc 120
ctggccttga actcctgacc acggtgggga agaaagctga agccgacaag aatgataatg 180
ccttagaaga ccttcagctg ctgatgtttg aagccagcct tactatctgt gggaataacc 240
ttgatgatcc cccaacccac tggaaccgcc tttattgaaa ggtcaaacag aggctctgta 300
ttggcgaaga ggcaatggca cctgaaggaa ccc 333

<210> 2097
<211> 292
<212> DNA
<213> Homo sapiens

<400> 2097
aagttctaat cagagtaatc agacaagaga aagaaatata gggcatccct acaggaaagg 60
aagaagtcaa accatctctt tgctgatgat attattctat atctaaaaaa ccctaaagac 120
caaaagtctc ctaaatttga tgacttcagg aaagtctcag gatacaaaat caacatacaa 180
aaatcagtag catttctata caccaataat atgcaaactg agagccaaat caagaatgca 240
atttcatttg cagtagccac acacacaaaa ataaaatacc taggaataca tc 292

<210> 2098
<211> 398
<212> DNA
<213> Homo sapiens

<400> 2098
cgttgctgtc gcatttacag aatttttttt gttaaaaaaa actgtagaaa tgaaggcttg 60
ttattctcat ttccattaca taaatggttg ctcaaatgtg aatttctaat ttatcatagt 120

ttatggtgat acattaagag actaatgtgt catttgtgtt ttgatttcta cattctagag 180
agacagttta atcagtccgt gaccaaaatc aaacagagta aactgtgtca tcatggagat 240
ctgcccagga aatccccaaa atacagaagg atcagaagta gatggaaata atgtcataga 300
acgtctctca caactgtgtt ataagaatga cagggaagct acaggttaca acagatttgt 360
gaactcagcc aagcacagtg gtggcagggc ctagctgc 398

<210> 2099
<211> 324
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(324)
<223> n = A,T,C or G

<400> 2099
acacagatac acacaacact cctctaaaca ccaccaaaat agacattctt ctcaagtgcc 60
tatggaacaa tcttcaggag agagcacatg ttaggctaca acacaagtct tcacaaattc 120
aaaagaaatt gaaatcatat aaagtatttt tgacaataac tataaaataa aactaaaagt 180
caatattata aagaaaatgg gaaaatccac aaatacgtag aaattaaaca acatactctt 240
caatgaccaa aaagtcaagg aaaaagacac aaggaaagtt gtaaaataca tcgattattc 300
tatcttcttg gtgaattagc caan 324

<210> 2100
<211> 389
<212> DNA
<213> Homo sapiens

<400> 2100
cgttgctgtc gattcaagtc ctttgcctat ttttttcttt ttttgaggag aatcgcttga 60
acctgggaga aggttgcagt gagcagagat catgccactg cactccagcc tgggcaacag 120
agcaatattc tgtacaaaaa aaaaaccagg acaaattgaa aaaaaaatgg aagcggggca 180
tgggggctca catgttaaat cctacctagt tgggaggctg aaatgggagg attgcttgag 240
tcccgggggt caaggctgga gggagctatt atggtaccac tgtgctccag ccagggcaac 300
aaagggagac cctgctgtat cttaaaaagg aaaaagggtg gggcgtgagg gttcacgcct 360
gtaatcccag cactttgaga cgccaaggg 389

<210> 2101
<211> 336
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(336)
<223> n = A,T,C or G

<400> 2101
atatgatata tcaacttaag ttattttaaa taacttacaa gacacattga aaacaagtaa 60
caaatgttaa tcctttgtga tcattatttt aaatgtaaat agattagact ccctagtcaa 120
aagactagag tggctgaatt ctgaatggat taaaagaaag aaaaagaaag attcgatttt 180
aaactttgta aaggaaactc actttagatt taagatcact tacaggctga aagtgaatgg 240
atggaaaaac acattctgtg caagttgtaa ccaaaagaga gcagagatga ctntacttat 300
atgagacaaa ataaactttg aaaaacactg tcaaat 336

<210> 2102

<211> 327
<212> DNA
<213> Homo sapiens

<400> 2102
tctagcagta gacagtatat aacttagagt caagaaatgt tgggccaggc gcggtggctc 60
acgcctgtag acgaaaggct cccggagtga tgatcgtcta gagacttgat agaacatgga 120
agggggacgt tgcccacata tatgcaaatc tattgcactg gagatattgc agacataaag 180
gaaatgggta ctgttcataa aagaatgccc cacaagtgtt aaaaatgtgc ctgataaaat 240
ataagtgact actggcctgg agcagtggct cacgcctgta atcctagcac tttgagaggc 300
caaggcaggt ggatcacctg aggtccg 327

<210> 2103
<211> 331
<212> DNA
<213> Homo sapiens

<400> 2103
ggggcagtat atctttgtta attgcccctc aatctctctc ctggaatggc atcctttac 60
tttgacctct gctccagagg aagatttctt ctccattcat atccgagcag caggggactg 120
gacagaaaat ctcataaggg ctttcgaaca acaatattca ccaattccca ggattgaagt 180
ggatggtccc tttggcacag ccagtgagga tgttttccag tatgaagtgg ctgtgctggt 240
tggagcagga attggggtca ccccctttgc ttctatcttg aaatccatct ggtacaaatt 300
ccagtgtgca gaccacaacc tcaaaacaaa a 331

<210> 2104
<211> 319
<212> DNA
<213> Homo sapiens

<400> 2104
aggctgaagt gcagtgatgc gatcatgact cactgcaccc tcaacctcct gggctcaagt 60
gatcctccca actcagcctg ccaaggggct ggtaccacag gaatgcaatc ataaacttct 120
gggctcaaat gatgactctt gatttggtac tcccaaagag caggaactac acgcatgagc 180
cactgagcct ggctggaact aaacagatca cactgtgcta aaagaaaata tttcccacgt 240
attacttcta acagctgtta cacaaatgcg tctaggttca taaactatat cacttgtaaa 300
attcccttta taacgctca 319

<210> 2105
<211> 332
<212> DNA
<213> Homo sapiens

<400> 2105
ggagttcaag gttacagtga gctatgatca tgccactgca ctccagcctg ggcaacagag 60
caagacttgt ctctaaaaaa taaaaataaa ggtgagatgc acaggacctg tgtgtagaat 120
gttatatgag taaggaaata tagtctaaag tggaaaataa aaaggttata gcaggcattt 180
aaagggagac aggaagagca agtggataga aaagtatttg aagagttagg gaacaaggga 240
gtaacacctg acttgcttct cagtctaccc gaagaatctg taaatcacca ggcatggtgg 300
ctcatgcctg taattccaac actttacgag gc 332

<210> 2106
<211> 193
<212> DNA
<213> Homo sapiens

<400> 2106

agacaaaaaa ggaaggaatc gaaccccccа tagctggttt caagccaacc ccatggcctc 60
catgactttt tcaaaaaaat agaaatgaat actataatga gggggcgctt ttctcttgaa 120
tccccaaatt tagaaaacct ttgggggggtg ggggcccccc ccccttttta tgggggggaa 180
aacatttttt ttt 193

<210> 2107
<211> 378
<212> DNA
<213> Homo sapiens

<400> 2107
ttccaacctt ccttttttta aattttctcc agtccctggg agcaagttgc agtcttttt 60
ttttttttcc cttttgggcc caacccccct tgttttaagg gccttttttt taaccccagg 120
ggcccaaatt aaatgggggg gaaaaccctt ggcccaaaaa ccaggggaaa aaaatcctta 180
cccctttttg gtcaaaagta atttttaacc cttcccccct gaacaaaaac cggtgggaaa 240
caaccccccc cgaccttggg gaaaaaaaaa aaaacctgcc ccctttcttt ttgtggaaac 300
tggagggggc gaagcccccg ggaaaaagcc aaaaaaaccc aacctttttc ccccccttcct 360
gggaaaatgg gcccaaaa 378

<210> 2108
<211> 343
<212> DNA
<213> Homo sapiens

<400> 2108
tctgcaggct gcagtgcaat ggcatgatca tagctcactg cagccttgaa cccctgggct 60
caagtgatcc tcccacttta gtgtcccaag tattaaatag ctggcattac agacatgtgc 120
caccatgcct ggctgtttct cgttttttttt agagatggga tctcactatg ttgccaaggc 180
tggtctcgaa cttctggcct caaatgatct tcttgccttg gcccctcaaa gagctggatt 240
acaggagtga gctactgtgt ccagcctaat cttcgttctt ggagtcaagt tgtgtaggct 300
ttgttttttg ctttgctttt ttttttttcc cccaccctaa gtg 343

<210> 2109
<211> 147
<212> DNA
<213> Homo sapiens

<400> 2109
cggtacggtt gcgagaaaac aacagaaggg gctctttccg ccatctttcc gcgccgccac 60
aatggtgcgc atgaatgtcc tgtcagatgc tctcttgagt atccacagtg ccgaaaagag 120
aggcaaacgc catgtgctta ttatgcc 147

<210> 2110
<211> 382
<212> DNA
<213> Homo sapiens

<400> 2110
ggcacgagct ggaatcctgc tatggagtta gatcatgtcc taaccttcag ctcaggcagc 60
tctaggcctg cttcccgccc acctggatgt cctgcttttg gccaagtcag cttgtctcag 120
gtctggtctc tcctcccatc catgtcgggt ccccccaacc ccctacaaca atagtgcttg 180
aactagagac tctttctcgg ccagcttctt ggcaaaggtt ttaaataaca catgcctctg 240
gctgggttct gtgctctgcc agtcgagtgg ccctcgtcag cctcatccac tttattctta 300
cccatctttt caggcttcac cctgaagaac tgggaggccc tccactgaag aagctgaaac 360
aagaggttgg agaacagagt ca 382

<210> 2111

<211> 460
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(460)
<223> n = A,T,C or G

<400> 2111
ctactaaaca agctacgcag gactttctgc aagatcccat cgattcgtag ttccgtagct 60
agtagcaact acccactcac ctatccaccc atccacctac ctatttgtca cccatccacc 120
catccatcca tccaatcacc catccaacca tcaatccaac cattttcatc tgttcatttt 180
ccatccatct acccgtccac ccattcactc ctccatccac ctacctatcc atttatcacc 240
catttaccca tccatccatc catccttcca accatttatc cacccatcca aacatttcca 300
tctgtttttc catccatcta cccatcccac cattcactca tccatcccac ttcctatcca 360
tttatcatcc atctacccac tcacccatcc atccaacctt ccaaccattt atccacccat 420
ccaactattt ccatctgttc attttccacc catttacccn 460

<210> 2112
<211> 385
<212> DNA
<213> Homo sapiens

<400> 2112
cgttgctgtc gttcaatttc ttgaatgttt taagacttgt tttgtgaacc taacatatgg 60
aatatcctac agaatgatcc atatgctgag gagaagaatg tgtattctgc agccattaga 120
tgaaatgttc ggtaaatatc tattaggtcc gtttggtctt tagtgcagat taaatccagt 180
gtttctttgg tgatttttctg tctggaagat ctgtctgttc aatgctgaaa gtagggtgtt 240
gaagtctcca gccattatcg tcttgagatc tcgctctctc tttagttcta atatttgctt 300
tatgtatctc agtgctccag tgatgggtac atatatactc acaatcattg tatcctcttg 360
ctgcattgac tgcattatca ttata 385

<210> 2113
<211> 333
<212> DNA
<213> Homo sapiens

<400> 2113
ggatttatcc ctgggatgca aggatgggtc aacatatgca aattaattaa tgtgatatat 60
ctcattaaca gaatgaaaga taaaaattac atctcaatag aagcagaaaa aaatttgaca 120
aaattcaaca ctcttttaca ataagaatta tcaacaaagt atggaaggaa tatacttcaa 180
catgttaaga gctataatac gaaaagccca gagacaacat cacaactagt ggtgaaaacc 240
tgaaagtgtt tcctctaaga tcaggaaaaa ggcaaggagg ccaactcttg ctacatctat 300
ttaacatagt actggaaatt ctagccagag caa 333

<210> 2114
<211> 311
<212> DNA
<213> Homo sapiens

<400> 2114
atactgcttt gtgatctgtg gattcctctt acagggttaa accatttttt ttgattcagc 60
aggttggaag tactcttttt gaagaatctg cgaggaaagg ttgggagccc attgagacct 120
atggggaata acagaatatc tccagataaa aacaagaaag aaattatctg tgcaactgct 180
ttgtgatgtg tggattcacc tcacagagtt aaacctttct tttgattcag catgttggaa 240
accctgtttt tgcatgttct gcgaagagac agttaagagc ccattgaggc ctatggggaa 300

aaccaaatat c 311

<210> 2115
<211> 313
<212> DNA
<213> Homo sapiens

<400> 2115
taaaggccag atgttatcag cagctgaaca gcatctacag aaaccagctg caaagacaga 60
agcagaaaaa ctggtttggt ggagagaccc gataacaaaa agttgggaaa taggtaaaat 120
aataacctgg ggtagaggtt atgcttgtgt ttctccaggc caaaatcaac agccgatttg 180
gataccatca agacacctga aaccttatta tgagccagat gctgaggaag agattctggg 240
aggatcccaa ggactcccca gttgcagcca tgtcgagact gatgctgaag aggaccccaa 300
ctgtcacaag caa 313

<210> 2116
<211> 355
<212> DNA
<213> Homo sapiens

<400> 2116
attaaaggaa ctcttaggtg aaaaatcaga taatgaaatt tacatctcaa agtacagaga 60
gaatctgatg gtgcttgagg gagattaaaa atgaatgccg aatcaaacat aaaattatag 120
aaatctatca tagaattatg taataagacc aattttattt tgctagagac cacctatctc 180
ctaactgggt atctgagctt tgggcagagc ccatgttcaa tcctggttct ccaaaaaagg 240
agaattctta tgtggctagg ccaggtgatt gttctacagt acatcaagga aatcttttta 300
acaaagacat ttctatgtgt ctaagctata ctattccttt aagatccaag agtag 355

<210> 2117
<211> 405
<212> DNA
<213> Homo sapiens

<400> 2117
cgttgctgtc gctttttccc agaaaacaag gggttagatg ttgcatttca taaaactaac 60
cgaagttctg tctactgatg cagcacaaga gatgtataaa aaaaaaaaaa aaaaaccccc 120
ccccgggggg aaagaccctt ttaaggtttg gtttggtttt ttttttgggg ttgggttttt 180
ggtttttta cctcagggaa aaacctggaa aaggggcaaa acctcttatt tggatttttt 240
attagggggc ctttttaaa aaaaaggctc cactgggaaa ggaaaaaggg gggggggggg 300
gggaaaaaaa aaaactttgg gggtaggggg atataaaaaa attttggccc tttggttcaa 360
aaaacccgca ttttaaaaaa aaaaaaattc ccaccccaac caccc 405

<210> 2118
<211> 386
<212> DNA
<213> Homo sapiens

<400> 2118
ggcacgaggt ttactggtgc agagaaccat tgcaggactt ctcctaaaga aaatttgtag 60
gggtgtcttt gtccaagaca ccccccagaa tctaaaaatg ctgcgtatag tggaaccttа 120
tgtgacctgg ggatttccaa atctgaagtc tgtgcgagaa ctcattttga aacgtggaca 180
agccaaggtc aagaataaga ccatccctct gacagacaat accgtgattg acgagcacct 240
ggggaagttt gtcgtcattt gcttggaaga cctcattcat gaaattgcct tcccagggaa 300
gcatttccag gagatctcat gggtcttgcg ccctttccac ctctcagtgg cccgtcatgc 360
taccaaaaat agagtgggct ctctca 386

<210> 2119

<211> 350
<212> DNA
<213> Homo sapiens

<400> 2119
atagttgttc acactgagcc tctagcagtt catcaattac agttcaggtt tcttatggaa 60
gtttgctgtg tgagtgtttc tgctctgatt actcgtgatt ctccgtattc accttctgtc 120
tctccagttt gggggcagct gtttgaccag tgacttaact tctcttacag atctaagaaa 180
agttgttgat ttttcagttt gttcagcttt ttacttgctc ttaggatcga gttgactgat 240
ctcttctcgc ctgcttcttt ttgtgttccc ttttttttt atactcaact tctttcctcc 300
tttatttgct cgcgtcctgg ttctcatcga ttctctcttc tccccttcct 350

<210> 2120
<211> 323
<212> DNA
<213> Homo sapiens

<400> 2120
attgagagct ataacaagaa ggcaaagtat cttcttgtgt gacctcagct gggaacatgc 60
acattgagag actcaaacct tttgctgccc cacacacatc catgaataac tacaacagtg 120
ctgcaagtat tgatttgggg gttttgaata aattttaatg agcagataaa tttgcaaata 180
cagaatctgc aaataatgag ggtcactggt atttggtgct ttttcgagaa tgggtggaag 240
acggcactca gctgggactg tccaatgggg agaggtccat gtgtggccct ccaacatgtc 300
acagggcact tggacttctt att 323

<210> 2121
<211> 317
<212> DNA
<213> Homo sapiens

<400> 2121
aggtagataa acggatggac agatgctggg tgaatggatg ggtggataga tggataaatt 60
gatatatgga tggatgagta gatacatggg tagatgggtg gacgaatata tgagtggact 120
agtaaatggg tgagtgaatg catggatgga tggatggata ttttgacgag ttaatatata 180
ttttggatgt ttaaggatat ttatttttag tatattggat tttattttat ttatttttgt 240
ttttttgtat attatttata ttttttgttt tttttataaa tatgttgttt ttgatatttg 300
cggtgtgttt atttttg 317

<210> 2122
<211> 387
<212> DNA
<213> Homo sapiens

<400> 2122
attctgtaca cacagcctat ggggtagccc tgctccacag ttgcggttgt acactgctgc 60
ttcaataaaa gttgctgttt aacactacca gctcacccct gaattctttc ctgggtgaag 120
ctaagaaccc tcccacgcta atccgcgatt ttggggcttg cctgtccttt caataggaca 180
ttgctaaatt gctctctaga attgcttttc caggttgggc gcagtggctc acatctgaaa 240
tcccagcact ttgggaggct gaggcaggca gatcacctga ggtcaggtgt tcaagaccag 300
cctggcctac atggcaaatc cctgtctcta ctaaaaatac aaaaattagc tgcgcatggt 360
ggcctatgcc tgtaatccca gctactt 387

<210> 2123
<211> 328
<212> DNA
<213> Homo sapiens

<400> 2123
attctgtaca cacagcctat ggggtagccc tgctccacag ttgcggttgt acactgctgc 60
ttcaataaaa gttgctgttt aacactacca gctcaccctt gaattctttc ctgggtgaag 120
ctaagaaccc tcccacgcta atccgcgatt ttggggcttg cctgtccttt caataggaca 180
ttgctaaatt gctctctaga attgcttttc caggttgggc gcagtggctc acatctgaaa 240
tcccagcact ttgggaggct gaagcaggca gatcacctga ggtcaggtgt tcaagaccag 300
cctggcctac atggcaaatc cctgtctt 328

<210> 2124
<211> 343
<212> DNA
<213> Homo sapiens

<400> 2124
gactttcaga gacaaacaaa agctgaggaa atttatcaac accagacatg tcttacaaga 60
aatgataaag ggagttcttt aatctaaaat aaatggacac tagatgcaac aagaaaccgt 120
ctgaaggtat tgaactccca ggtaaaagaa agaaaataga caaacttaaa atactcctaa 180
tactgtaatc gggataagta aatcatatat cctatgtatg aagactaaaa gacaaaaatg 240
ttaaaaataa ctgcaggcca ggtgcggtgg ctcacgccca gtaatcccag cactttggga 300
ggttgaggcg ggcagatcac gagatcaaga gattgagacc agc 343

<210> 2125
<211> 318
<212> DNA
<213> Homo sapiens

<400> 2125
gagtgcggtc acatacttcc agaagagcgg accagggctg ctgccagcac tccactcaga 60
gcgcctctgt cgctgggacc cttcaggtag gacagctccc aacgctgtgg ggactctcag 120
caaaacttct ccttcctttc cacggctctg cttcttctga cctcatctta gctttgcttt 180
ttctttttctt ccttcgctat ttttctatga tcctctaaga accaagtcct tgaaactttt 240
ggctcaaagt ggatacagag acaacttttt ctagaaagtt cagaaaagtg tattttgagg 300
acggagtctg gggaaatc 318

<210> 2126
<211> 302
<212> DNA
<213> Homo sapiens

<400> 2126
ccatccatcc atcctttcag ccagccagcc agcctgcctt ctgtctaacc attaatccac 60
tcagccacct atccacccat ccatccatgc attcagtcta tccatccctg catccaatcc 120
atcctttcat gtatctgtcc gctcatccat ccacccattc atctgtccat tcaaccaccc 180
acaaatctac ccatccatgt gtgggagagc atgatttaac tcatatataa acaatttata 240
attactgtga taagagctgc aaagggaata aacatggtat taaaggataa tagtcactag 300
tg 302

<210> 2127
<211> 347
<212> DNA
<213> Homo sapiens

<400> 2127
catatgcaga agacacctac cttgtaccat atataaaaat taatacaaag attaaaaatt 60
taaatgtaag accacagact ttatgcaccc tagaagaaaa cctaagaaac accattctgg 120
acgtcagctt tcggaaagaa catatgacta agtcttcaac agcaattgcg acaaaaacaa 180
aaattgacaa gtgggaccta aactaaagag tttctgcaca gcacgagaaa ctatcaacaa 240

agtatacaga cgacctacag aataggagaa aatattcaca aactatgcat ctgacaaagg 300
tctaataccc agaatctata acgaacttag gcaattctat aagcaag 347

<210> 2128
<211> 374
<212> DNA
<213> Homo sapiens

<400> 2128
ttccttggct tataaaacgt ttttcagttt gatgcaaaat gatgcgctta ttttggtttt 60
tgttggctgt gcatttggag tcagagccaa caaatcattg tcttgaagct tttcaactat 120
gttttcttct agcagtttta tagtttcagg tcttaggttt aagtctttaa ttcattttga 180
gttggatttg tgtgtggtgt gatgtaaggg atgcatgtgg atattcattt tcctgacaac 240
atttattgac gagattgtct tttccccatc atgggttctt ggcacctttg tcaaaaatca 300
gttgacctta aaaatgtgga tttatttctg ggctctctat tcttttccat tgaatgatct 360
gtttgttttt atac 374

<210> 2129
<211> 387
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(387)
<223> n = A,T,C or G

<400> 2129
agcactctgg gaggccgggg cgggctgttt gcttatgttc gggatttcna gaccagccta 60
ggtaacatgg caaaaccccg tctctacaaa aaatacaaaa attagcctgg cctatattcc 120
cagttacttg cggggctgaa gcaggaaaga ttgcttgagc ctacgaggtc gagactgcag 180
tgagctgaga ttgtgccact ggcactgtgg cctggatgat aaagtgagac cctgtcttat 240
aaaatcaaga gaaaagagaa gaatcagtat tgtgattaat aagggagaat tccacgctgg 300
gcatggaggc tcatgcctgt aatcccaaca ctttgggagg ccgagggggc atggatcttc 360
tgtgggcaag gattttcaga accagcg 387

<210> 2130
<211> 149
<212> DNA
<213> Homo sapiens

<400> 2130
gctctcgctc ggtctttctg ccgccatctt ggttccgcgt tccctgcaca gcctcctttt 60
tattcccttc cttcagaaat gcccggcgaa gccacagaaa ccgtccctgc tacagagcag 120
gagttgccgc agccccaggc tgagacagg 149

<210> 2131
<211> 402
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(402)
<223> n = A,T,C or G

<400> 2131

attccacatt ccagccagtg ggaaaaggaa aggggaatg gcataccctt tccctttaag 60
gtacacccta ggctgggcac agtggtgtga gccagaagtc ccagctactc gggaggctga 120
ggcgggagaa tcacttgagt ccaagagttc tgggttgtag tgcgctgtgt caatcgggtg 180
cctacactaa gctcagtatc aacatggtga tctccctggg agaggggaac caccaggttg 240
cctaaggagg gctgaaatgg cccagatcgg aaaggtcaaa actcccgtgc tgatccagta 300
gtggaatcac tcccgtanat agccaaaaca ctccagcctg ggcaacaaag tgagaccctg 360
tctctaanaa aaaaaaaaaa aaaaaacacc ctggctgggc ag 402

<210> 2132
<211> 336
<212> DNA
<213> Homo sapiens

<400> 2132
gctctgccag ccactggaga atggacgtaa tggagccaag gatggcacca ggaagtcacg 60
ggggcagtgt ttgctgctgt ccaggcaatc acagtattgg tgtcgtgtct cagcaggctg 120
ggggttgggg ccctggattc aaagcatcca tctgaacata ttgtcacccg tgcatcctga 180
gagagacagc ttcatggagt ggaggtgtgt ggcctggagg ccccacgtag gccaccaggc 240
atgttttcca cgaaaaccga aacttctgac gggattacta acattgggag atttccgttt 300
cttggacgcc agtggagggg ctgcaccagc cttaaa 336

<210> 2133
<211> 362
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(362)
<223> n = A,T,C or G

<400> 2133
gatgacttcc cttacctact ttgtccagag gctgttcacc tgggagacct gctggtatat 60
gggccacgga gatttgcacc cccttcccag gattctcaag tgccactaga agtctccaga 120
actgtgaatt tattctagca cgccctgcac ttcacaagaa aaagagatct ctccctgggc 180
tcctgccggc tcctccagga tacagcactg gagaaggcaa cttggtgttt cctatctccg 240
ccactctgga tttgggaatc caaacccaac tccctttcta tcactgacag cgattgaggc 300
caatgcctac tcctttggga tgatgctcgc ctgtctcaag accgactgac ccatgttcaa 360
cn 362

<210> 2134
<211> 278
<212> DNA
<213> Homo sapiens

<400> 2134
tgcggatgcg atcatgccac ggcactctag cctgcatgat agagcgagat cctgtttatg 60
aagaaaaaga gactgggcac ggtggctcac gcctgtaatc ccagcactct gggacgccga 120
cgtgggcgga tcacgaggtc acgagatcga gaccatcctg ggcaacgtgg agaaaccctg 180
tctctactga aaatatacca aataactggg gatggacggg cacacctgtt gcctcagttt 240
cttgggaggt taaggcctgg gaaccactcg ggcccggt 278

<210> 2135
<211> 316
<212> DNA
<213> Homo sapiens

<400> 2135
actggaatgg aatattttca gatatgacca gattgctttg aggaattgaa gttgacttta 60
tagagctaat aaaaaaccca gtttctttgc aagtttcctg acctgtgtac cttgactgaa 120
aaggtacctt tacaaggtac acagtttctt cacaaggttc ctgacctgtg gtaagtgacg 180
agtgttactt tctgacgtgc ccaggaacct caagttattt tgggacctca agaagagaag 240
aatttaccca attcatacag gcattgcaga cagtcaatga ttaatgacaa atccttgcct 300
tggttttata gcctcc 316

<210> 2136
<211> 340
<212> DNA
<213> Homo sapiens

<400> 2136
ccagctactt gggaggctga ggccggagaa tcacttgaac ccgggggcga gaggttccag 60
tgagccgaga tcctgccact gcactccagc ctgggcgaca gcatgagact ccgtctcaaa 120
aaaaaaaaaa aaaaaaaatg gcccgggaag gggggctaat ccctgaaatc cggccccttt 180
gggggggccgg gggggggga tcacctgggg taaggatttc aagacccccc tgaccaacag 240
ggggaaatcc catctttccc aaaaaaccaa aatttatttg accgtggggg cgggcccttt 300
gatccccaat ttttttggag ggcttgaaac gggaaaattg 340

<210> 2137
<211> 136
<212> DNA
<213> Homo sapiens

<400> 2137
gagccacctc gcgcgcgcct ccaggagcaa gtatggagag gctggtgatc aagatgccct 60
tctctcatct gtctacctac agcctggttt gggtcatggc agcagtgggg ctgtgcacaa 120
cacaagtgca agtggg 136

<210> 2138
<211> 408
<212> DNA
<213> Homo sapiens

<400> 2138
ggcacgagcc acggacgtcc aaaaagtcca aaccaaagga cagcgataaa gaaggaactt 60
caaattccac ctctgaagat gggccagggg atggattcac cattctgtct tctaagagcc 120
ttgttctggg acagaagctg tccttaaccc agagtgacat cagccatatt ggctccatga 180
gagtggaggg cattgtccac ccaaccacag ccgaaattga cctcaaagaa gatatagccg 240
ccgtcagcca atccagtgga ctcgcagcca aatttgtcat ccactgtcac atccctcagt 300
ggggctccga caaatgtgaa gaacagcttg aagagaccat caaaaactgc ctgtcagcgg 360
cggaggacaa gaagctaaag tccgtcgcgt tcccgccttt ccccagcg 408

<210> 2139
<211> 322
<212> DNA
<213> Homo sapiens

<400> 2139
attccacatt ccagccagtg ggaaaaggaa agggggaatg gcataccctt tccctttaag 60
gtacacccta ggctgggcac agtggtgtga gccagaagtc ccagctactc gggaggctga 120
ggcgggagaa tcacttgagt ccaagagttc tgggttgtag tgcgctgtgt caatcgggtg 180
cctacactaa gctcagtatc aacatggtga tctccctggg agaggggaac caccaggttg 240
cctaaggagg gctgaaatgg cccagatcgg aaaggtcaaa actcccgtgc tgatccagta 300
gtggaatcac tcccgtaaat ag 322

<210> 2140
<211> 334
<212> DNA
<213> Homo sapiens

<400> 2140
gactcactct gccagccact ggagaatgga cgtaatggag ccaaggatgg caccaggaag 60
tcacgggggc agagtttgct gctgtccagg caatcacagt attggtgtcg tgtctcagca 120
agctgggggt tggggccctg gattcaaagc atccatctga acatattgtc acccgtgcat 180
cctgagagag acagcttcat ggagtggagg tgtgtggcct ggaggcccca cgtaagccac 240
caggcatgtt ttccacgaaa accgaaactt gtgacgggat tactaacatt gggagatttc 300
cgtttcttgg acgccagtgg aggggctgca ccaa 334

<210> 2141
<211> 132
<212> DNA
<213> Homo sapiens

<400> 2141
gagccgcctg gataccgcag ctaggaataa tggaatagga ccgcggttct atttcgttgg 60
tttttcgagc tggggccatg actcacatgg ggtgtcgggc gtatttggat tgtttcgagt 120
ggaggggtgg gg 132

<210> 2142
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2142
taaacttaag taaaggagtg gaaaagggca tttcatgcaa atggacacca aaaacgagct 60
ggggtagcaa ttcttacata agacaaaaca aactttaaag caacaacagt taaaagagac 120
agagatgtta tataatggta aaagtccttg ttcaacagga aaatatcaca atcctaaaca 180
tacatgcacc taacactgga gctcccaagt ttataaaact atgactaata gacctaagaa 240
atgagataga caacaacaca ataatagtgt gggacttcaa tactccactg acagcactag 300
gcaggtcatc aagacagaaa g 321

<210> 2143
<211> 312
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(312)
<223> n = A,T,C or G

<400> 2143
ggagcactgg gccaaaaaca aaatcaagag ggaaattaaa aacattcttt gaattgaatg 60
acaataacag cacaacctat caaaacctct gggagcagct aacgtggtgc aaagaggaaa 120
gttcgtagcc ctaaatgcct acatcaaaaa gtctgaaaga gcacaaacag acaatctaag 180
gtcacacctc aaggaactcc agaagcaaga acaaaccaaa cccaaaccca gcagaaggaa 240
ggaaataacc aagatcagag cagcactaaa tgaaattgaa acaaacaaaa caacaaaata 300
caaaagacaa an 312

<210> 2144
<211> 157

<212> DNA
<213> Homo sapiens

<400> 2144
tccttttggg aggtgacgac ctacgggcac tttaacgtgc ctatcaccta ggatctccat 60
aatatgtctc tagaagagga gatgaggaat ccctctacaa aacacgtgat gcggagcccc 120
aattcctact tcctggatgt gaaacgccca tgatgct 157

<210> 2145
<211> 336
<212> DNA
<213> Homo sapiens

<400> 2145
tgctttgagt agtaagggca ttttaacaat gcttattttt ccagtccatg aatatggaat 60
atctttccat ttatttggat cttcttcaat ttcatgcacc agtgtttgat agtttttgtt 120
acagagatct ttcacttctt tggttgatac ctagggattt tataatattt attgatttgc 180
aaataatatt tattgatttg caaatgttga accatgcttg cattctaggg ataaatccca 240
cttgatcatg atgaatgatc tttttaatgt gttgctgaat ttgatttgct ggtattttgt 300
tgagaatttt tgcatcaata cttaattgca tttcag 336

<210> 2146
<211> 413
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(413)
<223> n = A,T,C or G

<400> 2146
gactcactct gccagccact ggagaatgga cgtaatggag ccaaggatgg caccaggaag 60
tcacgggggc agtgtttgct gctgtccagg caatcacagt attggtgtcg tgtctcaaca 120
ggctgggggt tggggccctg gattcaaagc atccatctga acatattgtc acccgtgcat 180
cctgagagag acagcttcat ggagtggagg tgtgtggcct ggaggcccca cgtaggccac 240
caggcatgtt ttccacgaaa accgaaactt ctgacgggat tactaacatt gggagatttc 300
cgtttcttgg acgccagtgg aggggctgca ccagccttaa aaagaaatca tgtgagcctc 360
cacgaatcag cagacacagg agaaantaag ggtctgccca ctttagtggg ttg 413

<210> 2147
<211> 338
<212> DNA
<213> Homo sapiens

<400> 2147
gtaacaaact gtggtcaagg cagaaacaaa cagtgagatc aaatcagtaa tttaaaaatt 60
gccaaaaacc aaaagcccag gtctaggcag attcacagct gaattatacc agaccttcaa 120
aaattaatgg tattaatcct attaaattat cccaaaagat tgaaaaaaag ggaatcttcc 180
ctaacatagc tgtgaaatca gtatcacttt gacaccaaag tcaggaaagg acatagaaaa 240
gtggaaagta gagaccaata tccctgatga gtatacacgc aaaaatcctc aacaagatac 300
cagcaaatat aatccaacag cacattaaaa ttgtaatt 338

<210> 2148
<211> 333
<212> DNA
<213> Homo sapiens

<400> 2148
ataagcaaaa ggcccagtcc ctgtcctcag gagctcatgg tccaagtcaa aatcacataa 60
aaacatttga gtccccttg aaatgagtat tgttttcttg aacaaatttt caacttgctg 120
tagttttttt cctgatcact ttcatcctgt ctttccaaga tgggatatgt ttatttagaa 180
attacttcac ctgggacagc tgcttctctc ttttgctcag gcccgtagca ctgcaggatg 240
ggcaagtgtc gtggacctca tactgctagg agtctctgta gtcaccaaca agatcagaag 300
tggcatgata aacagtacaa gaaagcccat ttg 333

<210> 2149
<211> 344
<212> DNA
<213> Homo sapiens

<400> 2149
cagtgttcaa gatacaaaat caatgcacaa aaatcagtag catttctata caccaacagc 60
atccagggtg cacgtggaat aaaaaacaca atcctactca aaatagccac aaagaaaatg 120
aaattatcta ggaatacagc taaccaaaga ggtgaaagac ctgtacaaag agaaccacca 180
aacactgctg aaagaattca gaaatgacac acatgaacag aaaacattcc atgctcatgg 240
attgaaagaa tcaatgtcat ttgaaatgtc catactgcac gaagtaattt aaagattcaa 300
tgctattcct atcaaactac caatgtcatt cttcatagga ttag 344

<210> 2150
<211> 400
<212> DNA
<213> Homo sapiens

<400> 2150
gggaaatgcg tgttctagct ttctgtgtgc ttaggtgccc gagctactga gggtctaagt 60
ccgggcagcc gaagagtgtg gtcgcaagat gaacaaagat gcgcagatga gagcagcgat 120
taaccaaaag ttgatagaaa ctggagaaag agaacgcctc acagagttgc tgagagctaa 180
attaattgaa tgtggctgga aggatcagtt gaaggcacac tgtaaagagg taattaaaga 240
aaaaggacta gaacacgtta ctgttgatga cttggtggct gaaatcactc caaaaggcag 300
agccctggta cctgacagtg taaagaagga gctcctacaa agaataagaa cattccttgc 360
tcagcatgcc agcctttaag attgaattag attgtggtgg 400

<210> 2151
<211> 354
<212> DNA
<213> Homo sapiens

<400> 2151
ggaaatgcgt gttctagctt tctgtgtgct taggtgcccg agctactgag ggtctaagtc 60
cgggcagccg aagagtgtgg ttagcaagat gaacaaagat gcgcagatga gagcagcgat 120
taaccaaaag ttgatagaaa ctggagaaag agaacgcctc aaagagttgc tgagagctaa 180
attaattgaa tgtggctgga aggatcagtt gaaggcacac tgtaaagagg taattaaaga 240
aaaaggacta gaacacgtta ctgttgatga cttggtggct gaaatcactc caaaaggcag 300
agccctggta cctgacagtg taaagaagga gctcctaaca agaataagaa catt 354

<210> 2152
<211> 278
<212> DNA
<213> Homo sapiens

<400> 2152
cgccggtgtg atacactgac ctgactatta acagcccaat atctacaatc aaccagcaag 60
tccttattac cctcactgtc aacccaacac aggcatgctc gtgggaaacc acccttttatt 120

tgagattaaa aaaggggget ttttttaaa aagccccacc acttggcata tcctgggagg 180
ggttggcccc ccccccccct tggtggccgg ggaaaagggc ctttttttg aatttttgga 240
acccccgggg ttttttgggc cccttataac ccggcatt 278

<210> 2153
<211> 336
<212> DNA
<213> Homo sapiens

<400> 2153
gggaaatgcg tgttctagct ttctgtgtgc ttaggtgccc gagctactga gggtctaagt 60
ccgggcagcc gaagagtgtg gtcgcacgat gaacaaagat gcgcagatga gagcagcgat 120
taaccaaaag ttgatagata ctggagaagg agaacgcctc aaagagttgc tgagagctaa 180
attaattgaa tgtggctgga aggatcagtt gaaggcacac tgtaaagagg ttattaaaga 240
aaaaggacta gaacacgtta cttgtgatga cttggtggct gaaatcactc ccaaaggcag 300
agcccttgta cctgacagtg tgaaaaaagg agctcc 336

<210> 2154
<211> 334
<212> DNA
<213> Homo sapiens

<400> 2154
agaacttgag aaactataaa tacatagaaa ctaagcaaca tgctcttgaa tgatcattag 60
gttaaggaca aaattaagga gaaaatcaaa aaaattcttg caacaaatga aaattgaaac 120
acaacatacc aaaaacctac gggatgtgga aaagaaggaa aatttccagc aataaatgcc 180
tacatggaaa aaatagtaag atttcaaata aacaatctaa caatgcaact ctataagcta 240
gatacacaaa aacaaaccag actcaaaatt agtaaaataa ataataagat cagagcaaag 300
ctaaataaat acgagagatc aatcaaacaa acat 334

<210> 2155
<211> 331
<212> DNA
<213> Homo sapiens

<400> 2155
ttctgtctca gcctcccgag tatctgggac tactggtgcc caccaccaca cctggctagt 60
tttttgtatt tttagtagag acggggtttc accatgttgg tcaggatggt ctcgatctct 120
tgacctcgta atgtacccga ctcgggctcc caaagtgcct ggatgacctc tacgtatctg 180
ttagatttac ttctccacgt tcttatcaac ctgtttgcgt atgctcatga gctgtttctt 240
gttccgggag tgaagccagg ccttttcctt tctcttatgc agagtaactg ccactgcctg 300
ggactttcag tcaacctcgt gcgccaggca c 331

<210> 2156
<211> 334
<212> DNA
<213> Homo sapiens

<400> 2156
aaattaacaa tctaacatca cacctagagg aactagaaaa acaaaaacat actaacccca 60
aactggcaga agaaaaaaaa ataactaaaa tcagagcagt actgtacaga attgagaccc 120
aaaaaaatca tacaaaaatt caacaaaacc aaaaggtggt tcttccaaag gataaacaag 180
attgatagac cacaggctaa attaacaaag aaaagagaaa agatccaaac aagcacaatc 240
agaaacaaca aaagtgaaat taccatcaat cccacaaaaa tacaaaaaat cctcaaaaac 300
tattatgaaa acccctatgc acaccaacta aaaa 334

<210> 2157

<211> 337
<212> DNA
<213> Homo sapiens

<400> 2157
agtgagccat gattgtgcca ccacactcca gcacaggcaa aaaagcagac cctatttcta 60
aaaaaaaaaa aaattaaaat taaaaacatt tttaaagaat gacatttcac aatgataaaa 120
tgacaaaccc atcatgatga tataataatt acaaacatat atgcccctaa caacagagcc 180
tcaaaataca tgaagcaaaa gctgacagaa ttgaagagta aaatcatcaa tacaaaaata 240
atatttggag ccttcaatat cccactttca attatgaaca gaacaactac acagaaggtc 300
aatgaggaaa taaaagattg aataacactt caaacca 337

<210> 2158
<211> 343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(343)
<223> n = A,T,C or G

<400> 2158
tacggttgtt agnnnnnnnn nnngggtact gtttttctga gcacaggata taggaatcaa 60
tctgttctta ttttatattt caggtaatat ctcccagctg taatgatgac atcacagtga 120
aaaaggatca gtgtttagtt cgatcattta ttgattctaa attgtgagta atgaatcctt 180
taatgatgtt acgtgggagg aaaaaaaaaa tagaattaca atgatagaca cctcccccac 240
caaaacttta tttttaaaag tctaatcatt catgaactga gaagttgtta cctaataggt 300
tttgactttt tgtaatgtag ggtatttttc actaataaat ttg 343

<210> 2159
<211> 354
<212> DNA
<213> Homo sapiens

<400> 2159
agggggtgcg gcgcgggtcc tccatatgct gagcgccggt cccctgggcc cacttttctt 60
tctctatact ttggctctgt tgcctttctt ttctcaagtc tctcgttcca cctgaggaga 120
aatgcccaca gctgtggagg cgcaggccac tccatctggt gcccaacgtg gatgctttcc 180
tctagggtga agggactctc gagtgtggtc attgaggaca agtcaacgag agattcccga 240
gtacgtctac agtgagcctt gtgggtgaag gtactctaca gtgtggtcat tgaggacaag 300
ttgacgagag agtcccaagt acgtccacgg tcagccttgc ggtaagcttg tgtg 354

<210> 2160
<211> 317
<212> DNA
<213> Homo sapiens

<400> 2160
gatataaatt aatatacaaa aatcaattgt atttctatac acttgcaatg aatcatccaa 60
aactaaaatt aagtaaacaa tttcatttac agtaacatca taaagagtaa aacatttacg 120
aataaattta acaaaaacat tttcaacata tactctgaaa actacaaaac attgtttaaa 180
gagagtcaaa aatatctaca gaataggaaa aagaatgcac attcacgaat aagaaggctt 240
gatattgttt aagatgacaa tattccccaa actgatctac agattcaaag cagtctgtag 300
cagaatccca gctgacc 317

<210> 2161

<211> 318
<212> DNA
<213> Homo sapiens

<400> 2161
gcatggatga ttttcaagga tagaccatcg ctaggccaca aaataagtct ttaaaaacta 60
aagaaaaaat ataattatgt caaatatctt ttccgattac acaggaaaaa gctagaaata 120
acaggaattt tggaaaatat gaaaaataaa cagtatgaat gtcctgaatg actagtgaga 180
aaacacagaa attaagaaaa aataaaaata aattgaaaca aatgagaatg aaaacacaac 240
ataccaaaac ctatgagata caacaaaagc agtactaaga ggaaggttta tggcaataag 300
tgcctacatc aaaaaagg 318

<210> 2162
<211> 234
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(234)
<223> n = A,T,C or G

<400> 2162
cccaggaggg ttggccggac acagtggtag tggctcacac ctgtaatcct aatgctttgg 60
gagcctgagg cgggaggacc ccttgagccc aagaggtcaa ggccacaatg agctatgatg 120
gtgccactgt actccggcct gggcagcaga gcaaaaccct gtctcanaag agagagagaa 180
agccgggtgt ggtggttcac acctgtaatc ccagcatttt gggagcccaa ggcn 234

<210> 2163
<211> 345
<212> DNA
<213> Homo sapiens

<400> 2163
agataaataa ttgtgtcttt ccttgtgttc attctgagct ttatatatac ttaatgcata 60
acacctatca cattggacta caactaactg tttcttccct tctaggtaat gatctccaaa 120
atataaacat gatttatcac ttggcacatg atatttcata aatgcttgtt gaacaaacaa 180
ataaaatact atcaaaggtg ggaaggaagg aacaaaaggg aaatagtatg agatagtttt 240
tacctgcacg agttcattga ggacaacagc atcaaagcca gaaaggtact gcacgtaata 300
cctctgcatt acaggtccgt atttcctcac atgtgctcta aggtc 345

<210> 2164
<211> 402
<212> DNA
<213> Homo sapiens

<400> 2164
cgttgctgtc gatttcgatt ttctggaaat ataatttgtc actttaaaaa ttatgtaaat 60
tgctattggt attaagtgta agaaaacttt gcttcatcta tgatcacaaa tattttcttc 120
tgaaaaaaaa gctctctgaa gagtttttt tttcaatgaa ggggttttct ttcttctctc 180
catatgttat cttctgaata gctaagcaat gtttacatta tttattcagg cctttccatc 240
cactttcacg gattccactg aaggagaaat tgggtttgaa atcctctttt ctcaaaaact 300
aatgagtcat gcgggcccat gatgagctgt aacttctcaa gaggaaagaa ccccgtagaa 360
aactatagct ggaaggatct aggttgacct gtctgtgatt ta 402

<210> 2165
<211> 303

<212> DNA
<213> Homo sapiens

<400> 2165
gaaggaaatt ggaaaaaaaa atttaaacaa atgataatga aaacacaaca ttccaaaaac 60
tatgagatgc aacaaaagca gtactaaaag ggaagttaat agatacaagt gcccacatcg 120
taagagaaaa aaaacttgaa ataacctaat gatgcatctt aaataactag aaaagcaaga 180
gcaaaccaaa cccaaattta tgagaagaaa agaaagaata aatatcatag cagaaataaa 240
ttaaattgaa acaaagaaaa caatccaaaa catcaatgaa atgaaaagtt ggtgtgttga 300
aaa 303

<210> 2166
<211> 314
<212> DNA
<213> Homo sapiens

<400> 2166
tcttcactga tgatatgatt ctatacctgg aaacccctaa acatttcacc aaaaagcttc 60
tagacttgat gaacaacttc agtaaagttt caggatacaa aatcaatgtg aaaaaatcaa 120
taccatttct atacaccaat aatgtttaag ctgagaacca aaccaagaac ataatctcat 180
ttacaataca cacacacaca cacacacaca cacacacaca cacacacaca cacagagata 240
ggtatatatc tacgcggggg ggtgagagat ctctacagag agatctacaa cactctggtg 300
agagaaatca gaga 314

<210> 2167
<211> 320
<212> DNA
<213> Homo sapiens

<400> 2167
ggcggcgcgg gtcctccata tgctgagcgc cggtcccctg ggcccacttt tctttctcta 60
tactttgtct ctgttgtctt tcttttctca agtctctcgt tccacctgag gagaaatgcc 120
cacagctgtg gaggcgcagg ccactccatc tggtgcccaa cgtggatgct tttctctagg 180
gtgaagggac tctcgagtgt ggtcattgag gacaagtcaa cgagagattc ccgagtacgt 240
ctacagtgag ccttgtgggt gaaggtactc tacagtgtgg tcattggaga caaggtgacc 300
agagaggccc aagtacgtcg 320

<210> 2168
<211> 313
<212> DNA
<213> Homo sapiens

<400> 2168
gcggcgcggg tcctccatat gctgagcgcc ggtcccctgg gcccactttt ctttctctat 60
actttgtctc tgttgtcttt ctttttctca gtctctcgtt ccacctgagg agaaatgccc 120
acagctgtgg aggcgcaggc cactccatct ggtgcccaac gtggatgctt ttctctaggg 180
tgaagggact ctcgagtgtg gtcattgagg acaagtcaac gagagattcc cgagtacgtc 240
tacagtgagc cttgtgggtg aaggtactct acagtgtggt cattgaggac aagttgacga 300
gagagtccca agt 313

<210> 2169
<211> 341
<212> DNA
<213> Homo sapiens

<400> 2169
ggatctcgct ccgggtcccg cagtgggtcc cggagaggaa gcttcgacgc cacagggaat 60

tcttcctact cttattccta ctcatttagc agtagttcta ttgggcacta gtagtcagtt 120
gggagaggac gctatacctt gacttcattt ataagactat ccactttatt aagtagtaga 180
aaacaaaata aaggtgctgt gtttatgata gacaagatat tctcctgctt acaacataac 240
ttaagacaga tgggggggct tttacgcatc gcgtctttcg ggctctatgt tctccttatc 300
ccaaaaattc gattttccgc gttgtgtata taaagtgagg g 341

<210> 2170
<211> 372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(372)
<223> n = A,T,C or G

<400> 2170
tacggctgtt agaatacgac agaacgggat tgtgtaagga gaccaatcta tttagatacg 60
agactaccta tattctaact ggatctctga gctctgggca gagccatcac tggaatcctg 120
ggtctccacc aagggagaat tattatgagg ctagaccaca cgatgctttt acagagcact 180
taaaaaaaaa tctttttttt ttgagacaaa aatttttttt ttttgaaag ggagtttggt 240
tttgtccccc aggttgaagg gtaaggccag aatttaagct cattgcaggc tttgggcccg 300
gggttaatgc cgttttcctg cctcaccctc caaagtatct ggaactacag ggccccgcca 360
ccaaaccggg tn 372

<210> 2171
<211> 328
<212> DNA
<213> Homo sapiens

<400> 2171
gcggcgcggg tcctccatat gctgagcgcc ggtcccctgg gcccactttt ctttctctat 60
actttgtctc tgttgtcttt cttttctcaa gtctctcgtt ccacctgagg agaaatgccc 120
acagctgtgg aggcgcaggc cactccatct ggtgcccaac gtggatgctt ttctctaggg 180
tgaagggact ctcgagtgtg gtcattgagg acaagtcaac gagagattcc cgagtacgtc 240
tacagtgagc cttgtgggtg aaggtactct acagtgtggt cattgaggac aagttgacga 300
gagagtccca agtacgtcca cggtcagc 328

<210> 2172
<211> 286
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(286)
<223> n = A,T,C or G

<400> 2172
acaacctgga aaggtcttcc tcactacacg gagtagtcaa acagtcaaaa atcaaagaca 60
aagacaaaat tctaaaacag caagaaaaaa agtatctagt cacttataag ataaatccca 120
actgacaaac aacaaatttc tcaacagaaa cctcacaggc caggaaagaa tgggttgata 180
cattcaaaat gctgaaacaa acaaaacaat gccaaccaaa aatactatac ccagcaaggg 240
taacctttat aaatgaaggg aaaataaagt atttctcaga taagcn 286

<210> 2173
<211> 360

<212> DNA
<213> Homo sapiens

<400> 2173
aaaaccactt taatacagtt tcaagataca aaatcaatgc acaaaaatca gtagcatttc 60
tatacaccaa cagcatccag ggtgcacgtg gaataaaaaa cacaatccta ctcaaaatag 120
ccacaaagaa aatgaaatta tctaggaata cagctaacca aagaggtgaa agacctgtac 180
aaagagaacc accaaacact gctgaaagaa ttcagaaatg acacaaatga acagaaaaca 240
ttccatgctc atggattgaa agaatcaatg tcatttgaaa tgtccatact gcacgaagta 300
atttaaagat tcaatgctat tcctatcaaa ctaccaatgt cattcttcat aggattaaaa 360

<210> 2174
<211> 345
<212> DNA
<213> Homo sapiens

<400> 2174
aaaaccactt taatacagtt tcaagataca aaatcaatgc acaaaaatca gtagcatttc 60
tatacaccaa cagcatccag ggtgcacgtg gaataaaaaa cacaatccta ctcaaaatag 120
ccacaaagaa aatgaaatta tctaggaata cagctaacca aagaggtgaa agacctgtac 180
aaagagaacc accaaacact gctgaaagaa ttcagaaatg acacaaatga acagaaaaca 240
ttccatgctc atggattgaa agaatcaatg tcatttgaaa tgtccatact gcacgaagta 300
atttaaagat tcaatgctat tcctatcaaa ctaccaatgt cattc 345

<210> 2175
<211> 358
<212> DNA
<213> Homo sapiens

<400> 2175
gcaagtaaag caggtgcatc taaaccagga aggagaacat acttggccct tgcttcttcc 60
cattttgtt ttttctcatc aaaagctttc ttcataattt ggtaccactt tctgaaatca 120
aaccatggct tatctgaaag aaataaaatc caagattatt aaccaaataa accacactat 180
aataatatac attgttcatc tgagttttca ttaattgact gcactgggca gttggtgtga 240
gtgtgtgatc aagatgtaga cattagagag acaacagaac tgaatgcagt aaagtataaa 300
aactcactcc tcactctttc actccataca gggattattc tccattattc tctggcga 358

<210> 2176
<211> 407
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(407)
<223> n = A,T,C or G

<400> 2176
cgttgctgtc ggttgctcct ggtcactccc tttatagcca ttactgtctt gtttcttgta 60
actcaggtta ggttttggtc tctcttgctc cactgcnnaa aaaaaaaaaa aaaaaaaaaa 120
aatttacccc cttaaaaaaa taaaaggggg gaaaaccctc ccccccaatt tttggggttt 180
ttgaagagga attttttttt ttcccccttgg ggggaaaaaa attttttttt ttggccattt 240
taaacccccc ccttttttggg gggggccctt ttttggaaag ggccccttaa caaaacctta 300
accgggggttt ttttaacccc gggggggggg gggggggcggg gcaaaaattt tttttggggc 360
ccctggcggg gttttttttt tttttaaaag aaattggggg cccccat 407

<210> 2177

<211> 328
<212> DNA
<213> Homo sapiens

<400> 2177
aattctcaat aattaagtat agaaggaagg taccgccaaa caataaagac cacatgtgac 60
agactcacgg ctaacatcat attgaatggg gaatagctga aagtaagaac tggaacagga 120
caaggaggcc cattttcact actgttttgt gatatggtac tggaaatcct agtcagaata 180
attagggaag agaaagaaat aaggggaatc caaattagaa agaaggaatt caaattgtcc 240
ctgttttcac aggacatgat cttatatata gaaaaacctа gactccacca aaaaactctt 300
agaactgata aacaaattca gtaaagtt 328

<210> 2178
<211> 305
<212> DNA
<213> Homo sapiens

<400> 2178
gggccccgga aatgcgtgtt ctagctttct gtgtgcttag gtgcccgagc tactgagggt 60
ctaagtccgg gcagccgaag agtgtggtta gcaagatgaa caaagatgcg cagatgagag 120
cagcgattaa ccaaaagttg atagaaactg gagaaagaga acgcctcaaa gagttgctga 180
gagctaaatt aattgaatgt ggctggaagg atcagttgaa ggcacactgt aaagaggtaa 240
ttaaagaaaa aggactagaa cacgttactg ttgatgactt ggtggctgaa atcactccaa 300
aaggc 305

<210> 2179
<211> 394
<212> DNA
<213> Homo sapiens

<400> 2179
cgtggctgtc gaccgtttat atgtttttct tttggtctga aatacttctg aacagaggtt 60
atttttttta gaaaaaggcc gagacggggc tttactatgt tgcccaggct gctgtctaac 120
tcctgggctc aagcgatcct tctgccttgg cctcccgaag tgctgggatt gcaggcataa 180
gctaccatgc tgggcctgaa cataatttca agaggaggat ttataaaacc attttctgta 240
atcaaatgat tggtgtcatt ttcccatttg ccaatgtagt ctcacttata aaaacaaaca 300
gaaacaaaaa cgggaaattt ccttcaacgg cctttattgg gggtaaaggg gatccttaac 360
ccccttttt atggaactct caaagcgggg tccg 394

<210> 2180
<211> 240
<212> DNA
<213> Homo sapiens

<400> 2180
gagtgcggtc acatacttcc agaagagccg accagggctg ctgccagcac ctgccactca 60
gagcgcctct gtcgctggga cccttcaggt aggacagctc ccaacgctgt ggggactctc 120
agcaaaactt ctccttcctt tccacggctc tgcttcttct gacctcatct tagctttgct 180
ttttatttte ttccttcgct atttttctat gatcctctaa gaaccaagtc cttgaaactt 240

<210> 2181
<211> 398
<212> DNA
<213> Homo sapiens

<400> 2181
gggaacttct gtgttatttt actcttaaaa ccaaactcta ccttttcttg gtgtttttt 60

tttttttttt gggaaccctt caaattcagg caaagaaggg ggttaatttt aaaaaccagg 120
gaaaaaacgg ccccccccatt tggttgacga agggttttaa gggcctaact gggccccagg 180
gcacacccgg gccaaattaa gcccggaatg ttgcccgggc ccgaaaaagc ccggggcccc 240
tgtttcttta tggggaatta aagggcgggg ggtaaaggaa ccattccttt ttctgggaaa 300
taaaaaccgc aaagttgcca tggcccgccc ctttttttgt ttcggggaat ccaatggggg 360
ggaacttggg gaaaacgggc cttgggaaaa aaaaaaaa 398

<210> 2182
<211> 310
<212> DNA
<213> Homo sapiens

<400> 2182
ggattgctct agctatttgg ggtctttcat gattccctat gagttttagg attttttttc 60
tatttctgta agaatgtctt tggtattttg atagggattg tgttggatat gtagattgtt 120
ttggatagta tagagatttt aataatattc attcttctag tccatgagtg tgaaatatat 180
ttccattttt ttgtgtcctc ttcaatttat tttatcagtg ttttgtaggt tttcttttag 240
agatttttca cctctttgat ttaatttatt cctgttttgt agctattgta aatgggattg 300
ttttcttgat 310

<210> 2183
<211> 226
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(226)
<223> n = A,T,C or G

<400> 2183
tgnnnttttnt atnttactta cagaccgaag cctcaacatc actttttttt accctgccgg 60
aggaggagac cccattctat accatcacgt attctgattt tggggtggcc ctgaagtttt 120
ttttttattc tatctggctt cggactaatc tccattttgt gtgttgttat tctggccaga 180
atatccattt ttttacattg ggtgcggcct gggcttcctt gtactg 226

<210> 2184
<211> 403
<212> DNA
<213> Homo sapiens

<400> 2184
tgacgctacc agctgagtta caagagaaaa tgatcacatg catcagaggc ttggagaaag 60
ctaaagtgat tcagccaggc tacggtgttc agtatgatta cttagatccc cgtcagatca 120
ccccttcctt ggagactcat ttggttcaac gactcttctt tgctggacag atcaatggca 180
ccactggtta tgaggaagct gcagctcaag gtgtgatagc cggaatcaac gccagtcttc 240
gggtcagtcg caagcctccc tttgtggtta gccgaacaga aggttacata ggagtcttga 300
ttgatgacct cactactctg ggcaccagtg aaccataccg catgtttacc agccgagtag 360
agttccgttt gtcactgcgc cctgataatg ctgacagccg gct 403

<210> 2185
<211> 397
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(397)
<223> n = A,T,C or G

<400> 2185
cgttgctgtc gcgacctgct tctgggtcgg ggtttcgtac gtagcagagc agctccctcg 60
ctgcgatcta ttgaaagtca gccctcgaca caagggtttg ccgttgctgt cgctagcagt 120
ggaagaagac tgaatatctc gtataccaga aacatgactc ttaaagatgg taaaaacaat 180
gtagccatag ctgtaacgta taaccatgat gggtcttata gcatgcagat tgaagataaa 240
actttccaag tccttggtaa tctttacagc gagggagact gcacttacct gaaatgttct 300
gttaatggag ttgctagtaa agcgaagctg attatcctgg aaaacactat ttacctattt 360
tccaaggaag gaagtattga gattgacatt ccagtcn 397

<210> 2186
<211> 307
<212> DNA
<213> Homo sapiens

<400> 2186
ggctgactct cttttcggac ttagcccgcc tgcacccagg tgaaataaac agccttgttg 60
ctcacacaaa gcctatttgg tggtctcctc acatggacgt gcatgacatt gggtgctgaa 120
acccgggaca ggaggactcc ttcgggagac cagtcccctt cccctgtcct cgccctcact 180
ccttgaggag atccacctgc aacctcgggt cctcagacca accagcccaa ggaacatctc 240
atgaatttca aattggatct tcttgactta gcagctgaag actgatgctg cccgattgcc 300
ttggaaa 307

<210> 2187
<211> 313
<212> DNA
<213> Homo sapiens

<400> 2187
aaagaccatt atgggccact ggacaaacac atgaatacac agaccattga cactataaag 60
caaccacaca ctcgagagga cagtaataat tagctgacga cacaagatca ggatcagagc 120
cacacctata aactctaacc ttgaatgtaa atggcataaa tatcctgatt aaaaggcaca 180
gagtggcaag ctggataaag aagaaatacc caatcgtatg ttgtcttcaa gagacccatt 240
tcacatgcaa tgacacacat aggctcaaaa taaagggaag gagaaaaatc tggcacccaa 300
gaggaaaaca gaa 313

<210> 2188
<211> 364
<212> DNA
<213> Homo sapiens

<400> 2188
tgcgtccaga ggacctgtcc ggcagcacct ccatgcctga gcccaagcca gggctcatgt 60
gaaggctcct gaagtaactc caagcccaga ggagcagtgg gacaaggcag ggagacaggg 120
gcggcaacgc gagctcttca ggggaggctc ctggactgcc taagcattgt tcctcccacc 180
cactgggcag aggcccccta cccccaggca gcgccagctg gaccaagcca ggaaccacga 240
gccagcggcc tgagcactca ccggtctcca catcctgcac gtagaagtgc aggtcatcag 300
tgatctcagt cacaaacacg ggcttgtagc tagcagatcg ctccttgtct cagcactggc 360
atca 364

<210> 2189
<211> 176
<212> DNA
<213> Homo sapiens

<400> 2189
tgggagggtg aggagggcat atcacttgaa tccaggtgtt cgagatcagt gtggacaaca 60
tgatgaaacc ctgtctctac caaaaatact gaaattagct gtgcatggtg gcactcgcct 120
gtagtcccag ctatttgggg gactaggcca gaggatcact tgagccaggg aggttg 176

<210> 2190
<211> 178
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(178)
<223> n = A,T,C or G

<400> 2190
ttggaaacca cagtttcatg cccatcgtcc tagaattaat tcccctaaaa atctttgaaa 60
tagggcccgt atttacccta tagcaccccc tctagagacg ggggncnnan natnntnntn 120
nnnaaaaagg gggtgttttt aaggacccca acagatgagc tccgctctgc agctggcg 178

<210> 2191
<211> 354
<212> DNA
<213> Homo sapiens

<400> 2191
agtgggcatg gctggggctg cacactccat ggagccaacg gaagccaaga acaggcggga 60
gccctactcc cttctgagtt ggcagggcca gtgcagctgc agccaaccag ctgtagctgt 120
ggacccaggc atcccctgcac tcttgactca ggaagccccc tgcccccaca ggctcaaaaa 180
tgcctgctcc cactgcctgg cctcttcctg ttcctggtgc ccgctccaat tttggagcaa 240
agttgaggct gagcccaggc actgtcgcaa cctgccacag tgcacgcatg ctcagggcag 300
cactgataca ccagcccccc gccaacttgg ccctctctgg gctttgggca gaga 354

<210> 2192
<211> 313
<212> DNA
<213> Homo sapiens

<400> 2192
gtgatccaca cacctcggcc tcccaaagtg ccgggatgac aggtgtgagc cactgtgcct 60
ggcctgaaat gattatgtct ctatgtataa ataaatgaaa atcaaggcca ggcacggtgg 120
ctcatgtctg taatcctatc actttgggtg gccgtggcag gtggatcaca aggtcacgag 180
ttcaatacca tcctggccaa tatgatgaaa ccccatcttt attagaacta cccatattta 240
tccggtcgtg atggagaaaa cctgtagtcc cagctactcc ggaggctgtt ggaataactt 300
ttttaatctt tct 313

<210> 2193
<211> 327
<212> DNA
<213> Homo sapiens

<400> 2193
tgttgcagtc gaggactgca acagcccact gacagcactg gacagatcac cgcagaaaac 60
taacaaattc tcgacttaaa ttgaagtttt gaccaaatgg acgtaataca cacgtacaga 120
ataccctacc caacaaccac agaatacaca ttttactcat ctttgcatgc tctaaaaatg 180
accacatgct cagtcataaa gcaagtctca ataaattcaa aaaagcagaa atcataccaa 240
gcatctgttt ggaccacagt tgaataaaat tagaaatcaa taccaagaat aactctgaaa 300

gccacgtaag tacatggaaa tgaaacg 327

<210> 2194
<211> 387
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(387)
<223> n = A,T,C or G

<400> 2194
agataaacat aaatggaaag atatcttgtg ttcatggatt agaaggctta acattattaa 60
aatagctata ctaccacaaa caatctacag attgttattc caatccaaat ccccaaagta 120
tgttttacag aaatagaaaa caccatccta aaattcagat gcaatgacaa aagagcaata 180
gccaaagcaa tctcgagaag gaaaaacata gttggaggta tcacatttcc tggtttgaaa 240
atagattaca aagtcatggt aattaaaaca gtatggcaca ggcataaaga cacatataga 300
ccaatggaat agaatacaaa gcccagaatg aaattcacac acatatggtc aactgccttt 360
gacaaaggtt cgaanagtac acaacag 387

<210> 2195
<211> 256
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(256)
<223> n = A,T,C or G

<400> 2195
accttactac cagacaacct tagccaaacc atttacccaa ataaagtata ggcgatagaa 60
attgaaacct ggcgcaatag atatagtacc gcanaaaaaa aaaaaaaaaa aaaaaccttt 120
gggggggcggt ttttttcggaa atcccaaccg ggaaaaaacc ttgggggggg tgggcccacc 180
ccccccctaaa agggcgggga aaaaagggtt tttttgggaa attgggaggg ctttgggttt 240
tttgggaccc cataaa 256

<210> 2196
<211> 330
<212> DNA
<213> Homo sapiens

<400> 2196
gttccctaga acgtgcaatg ccacagtcag agacgttcaa actggaagcc aggacaacaa 60
gatgctgact taaagctgtg gacagccttc tccaagatgg cagaagaaga ctccatgtca 120
taatgactct tacccctttt aatttttttt tacttatgcc tgcctctttc acttgggaag 180
aaaatgctgg caccacaatt tcacaattcg catcttttgg ggaaaaaagg ctggatggtt 240
cacccctttt tagctgctgt tatttgttta ttttggcgcc cgccttttt acttggcgtg 300
aagagggctg ctctttaaaa tttccacacc 330

<210> 2197
<211> 319
<212> DNA
<213> Homo sapiens

<400> 2197

ggtacaagtg tccaatggtg ctatattctt tcctgatttt tggctaccct aaatccatta 60
tgcagatagg gctggtgttc tgccagtttg cacatcttcc cactaaggta tgctctgttg 120
tatctttcag gcttattcaa acctccttag agctaacatg gatgggttga agaagagaga 180
caaaaagaac aaaactaaga agaccaaagc agcagcagca gcagcagcag cacctgccgc 240
agcagcaaca gcagcaacaa cagcagcaac aacagcagca acagcagcac agtaaagggc 300
atacatttcc tgctttcac 319

<210> 2198
<211> 380
<212> DNA
<213> Homo sapiens

<400> 2198
tactacggtt gcgacatgac gacagacagt gatcagggcg cacacacccc aactgacagg 60
cggtgcctct gctggcttat atgtgcttgt ctggcagcta tggctagagc tgtggccctc 120
ccaacctgca actggcgatc tgacaacggg cagacgcgtc tcctctagtg tttccgtgac 180
ccctgacccg cgagcacgct atctgggagg caccccctag tatgggcaga ctgacacctc 240
acacggccgg gtactcctct gagacaaaac ttccagagga acgatcagac agcagcattc 300
gtggatcacg aaaatccgct cttctgctgc caccactgct gtgacccagg caaacagggt 360
ctggagtgga cctctagcaa 380

<210> 2199
<211> 346
<212> DNA
<213> Homo sapiens

<400> 2199
atttttctct tccccaccac agcatctttg cgtgtgtgtg tcggcgggtg ttggaggggg 60
caagttaagc ctcattccct ataatttgga acattccttc ggatttgatc gagtcagata 120
gagttggtca aacccaatgg gaaaaagact aaaggaacta caaaacagaa acaaacaaat 180
gacaacaaca acaaaaaaac aggtaagcaa aacaaacaat caattgcaca acttatacaa 240
ttagtgagca ctctaatggt aaggagaaat taagtccagc tggttgttaa tcttaacttt 300
ggccaagaca aaccccagtt cagttactta cctgcagacg ggtctc 346

<210> 2200
<211> 144
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(144)
<223> n = A,T,C or G

<400> 2200
cactacctat aaaatcccaa acatataact gaactcctca cacccaattg gaccaatcta 60
tcaccctata gaagaactaa tgttagtata agtaacntgg agaaaagggc catttttgg 120
aattaatagg gggggggttt tttt 144

<210> 2201
<211> 316
<212> DNA
<213> Homo sapiens

<400> 2201
atctgtgaaa agatatttgg taacacatta aggcctatgg tgaaaaagga aatatcttca 60
gataaaaacc agaaagaagt tttcttagaa actggttttg cttgtgtgca tttatctcag 120

agagttaaaa ctttctttgg attcagcagt ttagaaacac tgttttgtc cattctgtga 180
atggacgttt gggagctcat tgaagccaac gtcaaaaagg tgactaaccc aggattaaaa 240
cttgaagaaa gctatctgag aaatagcttt ctgatgtgtg cattcatctc acagagttaa 300
aactttctct tcattc 316

<210> 2202
<211> 366
<212> DNA
<213> Homo sapiens

<400> 2202
aaagatctca atgaaggatc taacatcaca cccagaagaa acagaaaaac aagaggaaat 60
caaccacaaa gctagcagaa aaaaagaaat aaccaaaatc agagcctatt tgagtgaaat 120
ggaaatgaca aaaagataca aaaaatcaag gaaactaaaa attgtatttt tgaaagacta 180
aataagattg atacaccagt aactagacta atacagaaaa aaagagagaa gatccaaata 240
aacacaatca taaatcacaa ggaggacact aacaccaacc ctacagaaat acaaaagatt 300
tctcacagac tattatgaat tctctatgca cacaaagtgg aaagccagaa gaattagata 360
aattct 366

<210> 2203
<211> 451
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(451)
<223> n = A,T,C or G

<400> 2203
gtcgtggagg tggatctggc aattttatgg gtcgcggagg gaactttgga ggtggtggag 60
gtaattttgg ccgtggtgga aactttggtg gaagaggagg ctatggtggt ggaggtggtg 120
gcagcagagg tagttatgga ggaggtgatg gtggatataa tggatttgga ggtgatggcg 180
ncncctatcg cggcgccccc ggcccttgcc tcctggcctg ctatcctggc ggcgcgcccc 240
cctgtctccc ccacgcgctt cgccctggtg gtacccggag gatttcactc gaacgtcctc 300
cacggcctgt tgccgccttg tcccttccgc ggcctccctt tctcctgggg cccattctgc 360
cggagaatng actatctctc cccctgacca ctagcttccg tcactccctg accccgcanc 420
ctatctcttc ctcccaccgg ggcccccccac n 451

<210> 2204
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 2204
ttagcagaaa cgatagcctg ttatagtgga cagcttgctg ctctgacgga tgaaaacaca 60
acgctccgtt ctaaactgga gaagcaaaga gagagcgggc aaagactgga aacagaaatg 120
caatcatacc gttgtagact gaatgctgct ctatgtgatc atgatcaaag tcactcatca 180
aaaagagacc aagagcttgc tttccagggc acagtagata aatgttgtca tttacaggaa 240
aatttgaatt ctcatgttct gattctttct ctgcaacttt ctaaagctga gagtaagttc 300
agagtcctcg aaactgagct ccattacaca ggagaggctc tgaaagaaaa ggctttggtt 360
tttgaacacg ggcaaaggga gctan 385

<210> 2205
<211> 417
<212> DNA
<213> Homo sapiens

<400> 2205
cgttgctgtc gggcaagcgt tcgatttttt gtcgttggat cgcgagcggt gtctgcttgt 60
gccgccgagg gctcccagga cagggcaggg atctaggggg tttgcgcacc tgcttttaa 120
tgccccgccc ccccttttt tttttaaagg gggggggtg aaagtgaggg aggaaaaggg 180
acaaaatact gactggaacg taaattcgag catttcttat gcgaagagcg gataaccagt 240
tccggattct tttttaagtt tctccattag ataaatttaa ttttcaaagg ctccggtttg 300
caggctaaat tttgaaacta gcccggggtt tggcaaaatt tgactgaatc ctgggggggag 360
aggctggacc cacgcccaag ggtatctaga atattgagcc cggcagttca aaccagg 417

<210> 2206
<211> 410
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(410)
<223> n = A,T,C or G

<400> 2206
cgttgctgtc gggcgggggt ccgggagaag cggcggggtc gcgggacagg agaagcggag 60
gaagagtatg tggggccccg gctgagccga cggattttgc agcaagcacg gcagcaacag 120
gaggaactcg aggccgagca tgggactggg gacaagcccg cggcgccgcg ggaacgcacc 180
acgcggctgg gtccaagaat gcctcaggat ggatcagatg acgaggacga ggagtggccc 240
accctggaga aggctgccac aatgacagca gcgggccatc atgcagaggt ggttgtggac 300
cctgaggatg agcgtgccat agagatgttc atgaacaaga accctcctgc caggcgcacc 360
ctggctgaca tcatcatgga gaagctgact gagaagcaga cagaggttgn 410

<210> 2207
<211> 413
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(413)
<223> n = A,T,C or G

<400> 2207
ggcacgagag gcactgagtt catttcactg acacggcccc tggactccca cctagaacat 60
gtggatttta gttctctatt gcactgtctc agttttgaac agatacttca gatctttgcc 120
tctgccgtgc tggagagaaa aatcatcttc ctggcggaag gtctcagcac cttgtctcag 180
tgcatccatg ctgctgccgc actgctctac cccttcagct gggcgcacac ctacatccct 240
gttgtccctg agagccttct ggccaccgtc tgctgcccca ccccttcat ggttggagta 300
caaatgcgct tccagcagga ggtcatggac agccctatgg nagaggtcct gctggtcaat 360
ctttgtgaag gaaccttctt aatgtcggtt ggtgatgaaa aagacatcct gct 413

<210> 2208
<211> 328
<212> DNA
<213> Homo sapiens

<400> 2208
gccaacagta agttttttac aatagccatc ctaatgagtg tccatatacg gttttttttt 60
tttggttgga aagggagtct ggttttgttc cccagcctga agggcagggg ggcaattttt 120
gttaattgaa aactccgcct ccaaggttaa cgcatttttc tggcctaacc ctccaaggta 180
gctgaaacta caaaggcccg cccccaccce gggctaattt tggattttta agaacaaacg 240
gagtttattt acgtgggccg ggtgggtcta aaactccgga cctaagggga ccccccccgcc 300
tggccctccc aaggggcggg aataacgg 328

<210> 2209
<211> 327
<212> DNA
<213> Homo sapiens

<400> 2209
cactgcaagg tccacctccc gggttcacgc cattctcctg gctcagcctc ctgagtagct 60
gggactacag gcgcccgcca ccatgacccgg ctagtttttt ttggattttt agtaaagaag 120
gggtttcacc gtgttagcca tgatggtctc gatctcctga cctcgtgatt tgtccgcctc 180
agcctcccaa agtgctgact ctgtgcgcgg gcagttgcta atcggactga tgcgtgcttc 240
attcgagtta ttggatctga gcttgtacag aaatacgtcg gtgaggggggc tcgaatggtt 300
cgtgaactct ttgaaatggc cacaaca 327

<210> 2210
<211> 397
<212> DNA
<213> Homo sapiens

<400> 2210
cgttgctgtc gctccctatc taccctcacc ccacgagaca gccccttcag gtatgtgtgt 60
gtgtgcatgt gtgtgcatgt gtgtgcatgt gtgtgcaggg gtgtgtgtgt gtgggggggg 120
ttcccaaata ttcagggcaa gggaccagtc ggaagggatt ctggctattg ggggagccca 180
gagacagggg aaggcagcct gtccatctgt gcataaggag aggaaagttc cagggtgtgt 240
atgtttcagg ggcttcacat ggaggagctg cagatagata tgtgtttctg tgtatgtgta 300
tgtctgcctt tttttctaag ggggggcttc tacaggcttt tgaaagtaag gtggaagtgg 360
taaggctgat aagaaaaaac aaacttattt tgtagcg 397

<210> 2211
<211> 337
<212> DNA
<213> Homo sapiens

<400> 2211
aacaaaacaa ttatcagcca agaattttgt atccagtcct atgtttgccc tccttaaaca 60
aaacaattat cagccaagaa ttttgtatcc agcaaaacta ggcttcataa atgaaggaaa 120
gataatcttt cagacaaaca aatgctgaga gaatttgcca ctaccaagcc aacactataa 180
gaaatgctaa aaggagctct aaatcttgaa acgaatcctc gaaatacaca aaaatagaat 240
gttcttaagg cataaatctc acaggatcta ttaaaacaca cacacacaca cacacaatga 300
aaaaaaaaca caaggctttt aggtaacaaa taccacg 337

<210> 2212
<211> 334
<212> DNA
<213> Homo sapiens

<400> 2212
gaacaaacca acatttgagc caggaataac tagagaggaa caatggggtt attcagaggt 60
tttgttttcc tcttagttct gtgcctgctg caccagtcaa atacttcctt cattaagctg 120

aataataatg gctttgaaga tattgtcatt gttatagatc ctagtgtgcc agaagatgaa 180
aaaataattg aacaaataga ggatatggtg actacagctt ctacgtacct gtttgaagcc 240
acagaaaaaa gatttttttt caaaaatgta tctatattaa ttcctgagaa ttggaaggaa 300
aatcctcagt acaaaaggcc aagacatgaa aacg 334

<210> 2213
<211> 322
<212> DNA
<213> Homo sapiens

<400> 2213
gagcactttg aggcctatgg tgaaaaagaa aatatcttca gataaaaact agaaagaaac 60
tttctgagaa actgctttgt gatgtgtaca ttcatctcac agagttaaaa ctttcttttc 120
attcagcatt ttgggaagta tgtttttgtc cattctgcaa aaggacattt gggagctcat 180
tcagaccaat ggcaaaaaag aaaatatccc aggataaaaa ctagaaggaa gctgagaatc 240
catttgtgat gtgcgcattc atctcacaga gtgaaaattt tcttttgata catcagtttg 300
gaaacatggt ttttgtagaa cc 322

<210> 2214
<211> 295
<212> DNA
<213> Homo sapiens

<400> 2214
gctaaaccta gccccaaacc cactccacct tactaccaga caaccttagc caaaccattt 60
acccaaataa agtataggcg atagaaattg aaacctggcg caatagatat agtaccaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaggggag ggtttttcc ggaaacccca aagggaaaaa 180
aacctttggg gggggggaa aacccccct taaaggggg ggaaaaaaag ggttttttgg 240
gaaaattggg gagggtttgg tttttttga aaccattaaa agggggaaaa aaaaa 295

<210> 2215
<211> 314
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(314)
<223> n = A,T,C or G

<400> 2215
gatttgccat agtagttaag ataatacagg ctttgccctt tcaaatgcca taggtgttat 60
tgactagtac catataatcg cctttaatnc ttaaactagt tcacgtcata cattttaatt 120
atcctagtct ctgtaattga tatttatcat gaagattgca ttgctcttat ttcagaaaaa 180
tatgttgaga aacttttgg agtaaacaaa gatcgaatgt caatggacca gatggctgtt 240
ctccttgtta gcaatatcaa tgaaagtaaa ggtcatagta agtacatata taantgtgtg 300
tgtgtgtgtg tgtg 314

<210> 2216
<211> 313
<212> DNA
<213> Homo sapiens

<400> 2216
actgaatgac tgattggtca atgaaaaaaa ttaagaagaa aaattttaaa attctttaaa 60
caaatggaaa tggagacaca acataccaaa gcctatggga tacagcaaaa gcactactaa 120
gaggaaagtt tatagcaaca agtgcctaca tcaaaaaagt agaacttcca ataaacaact 180

taatgatgca tcttaaagag ctagaaaacc caaatagtag aggaaaagaa atagtaaaga 240
ccagagcaga aaaaaataaa attgaaatta aaaaattaca aaagatcaat gaaacaaaaa 300
gttggatgtt tga 313

<210> 2217
<211> 332
<212> DNA
<213> Homo sapiens

<400> 2217
gagcactttg aggcctatgg tgaaaaagaa aatatcttca gataaaaact agaaagaaac 60
tttctgagaa actgctttgt gatgtgtaca ttcatctcac agagttaaaa ctttcttttc 120
attcagcatt ttgggaagta tgtttttgtc cattctgcaa aaggacattt gggagctcat 180
tcagaccaat ggcaaaaaag aaaatatccc aggataaaaa ctagaaggaa gctgagaatc 240
catttgtgat gtgcgcattc atctcacaga gtgaaaattt tcttttgata catcagtttg 300
gaaacatggt ttttgtagaa cctgtgaagg gg 332

<210> 2218
<211> 327
<212> DNA
<213> Homo sapiens

<400> 2218
gatatactta gaacatttta tccaacagca gcaggacaca cattcttctt gagagcagat 60
gagacattct ccaggacagc ttatcttttg gaccacaaca caagttttaa aacatttaag 120
aagactaaaa taatatcaac tatcttttcc aattgcaata gtatgaaact agaaatcaat 180
aatagggggа aaactagaaa acacaaatat gtggaaatga aacaatgcat tcctgaacaa 240
tcaatgggac aaaagaggaa tcaaaatata aattaaaaat taccttgaac caataaaaat 300
ggaaacacaa cacatcaaaa cttgtag 327

<210> 2219
<211> 416
<212> DNA
<213> Homo sapiens

<400> 2219
tcccatcgat tcgaattcgg cacgagctgg cccggtggcg ccagagctgt ggcgcgtcgc 60
ttgtgagtca cagctctggc gtgcaggttt atgtgggggа gaggctgacg ctgcgcttct 120
gggcccgcgg cgggcgtggg gaaaaaaaga aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaactttc tccaaaaaaa aaagaaatgt atcataagcc 240
atgcaacaat tacaaacgca cacgctgggt ctcccaacaa acacaaaccc aaaatatttt 300
acaaagcttt tcttttggaa aagacccaga cccacttatt aataggaaac ccaaaaaagg 360
gcaacaagca aacaaaacac agctttacca cttgtataag tgtgacctac aggggg 416

<210> 2220
<211> 339
<212> DNA
<213> Homo sapiens

<400> 2220
ggtctttcga acaacaatat tcaccaattc ccaggattga agtggatggt ccctttggca 60
cagccagtga ggatgttttc cagtatgaag tggctgtgct ggttggagca ggaattgggg 120
tcacccccct tgcttctatc ttgaaatcca tctggtacaa attccagtgt gcagaccaca 180
acctcaaaac aaaaaagatc tatttctact ggatctgcag ggagacaggt gccttttttct 240
ggttcaacaa cctgttgact tccctggaac aggagatgga ggaattaggc caagtgggtt 300
ttttaaacta ccggttcttt ctcaccggat gggacagct 339

<210> 2221
<211> 124
<212> DNA
<213> Homo sapiens

<400> 2221
ggacgctttt catctgtccc gctgcgtgtt ttcctcttga tcgggaactc ctgcttctcc 60
ttgcctcgaa atggacccca actgctcctg ctcgcctgtt ggcttctgtg cctgtgccgg 120
cttc 124

<210> 2222
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 2222
caaacagtgt ttccaaacag tgaatgaaaa gaaatgttta actctgccag atgaattaca 60
caacacatag caatttctca catagcttcc ttctcgtttt tacccttagg tagtcctttt 120
ttgccattgg cctcaaggag ttccaaaagt ctatttgtag aatggacaaa aagagtgttt 180
gcaaactact catacaaaag acatgtttaa gtcagcaaga tgaaagcaca catctcanag 240
aggtttccca gatagcttcc ttccagtttt tatcctagga tattcctttt ttctaccttg 300
gcctcaatga tgtccaaaat gtttattttc acagtggact aaaacagtat ttccaaactg 360
ctgaaacaaa agaaagattt aactt 385

<210> 2223
<211> 337
<212> DNA
<213> Homo sapiens

<400> 2223
ctcacataaa cttaaggtaa aggggtggac aaagatattc catgcaaatg gacaccaaaa 60
gtgagcagga gtagctattc ttatatcaga caaaacaaac cttaaagcaa cagcagttaa 120
aaaaagaggg accttatata atgataaaag gactagtaca aaaggaaaat atataatgat 180
aaaaggacta gtacaaaagg aaaatatcac aatcctaaat atatatgcac ctaacactgg 240
agctcccaaa tttataaaca attactgcta gacctaagaa atcagataga tggcaacaca 300
gcaatagtgg gggactttaa tactccactg acagcac 337

<210> 2224
<211> 418
<212> DNA
<213> Homo sapiens

<400> 2224
aaacaaaatg cccatgttgg tcctctgcca tggacctgcg atattctgga ctatttctgc 60
gtttatttgc ggccgagtgt aacaaccata taataaatca cctcttccgc tgttttagct 120
gaagaattaa cacaaaaaaa aaaaaaaaaa aagaaaaaaa acaaaaaaaa aaaaaaaaaa 180
aatggaaatc tgaaagccat cccaaaagaa gacccacccc caaaagaaag tagaaccaaa 240
accctggaga gcctcccctа ccataggact ctctcgctag atccgtgact ataaaaaaaa 300
ccgggggaa gagccgggcc accccattct acaggccaac tagggaccct cgagataccc 360
ccttatttct ggcgccctga gagaaggggc cccaaacgga ccccgaaatt taccccccg 418

<210> 2225

<211> 328
<212> DNA
<213> Homo sapiens

<400> 2225
ttacacatca gtttctcaga agacttcttt ctagttttta tctgaagagg cttccttttt 60
taccatgggc ctcaatgctc agtgaaatat tcctttgcag atcctacaaa aacagtgttt 120
ccaaacagct gaatgaaaag aaaggtttaa ctctgtgaga tgaatgcaca catcacaaag 180
cggtttctca gataggtttc ttcgagtttt tatcctggga tattcgctcc ttcgccattg 240
gcctcaatga gctccaaaat atccattctc agaatggaca aaaacagtgt ttccaaactg 300
aggaatccaa agaaagggtt aactctgg 328

<210> 2226
<211> 390
<212> DNA
<213> Homo sapiens

<400> 2226
ctaaaaatca atgattggag gaatttggga aactatacaa atacatgaaa attaaacaat 60
atgcttctga atgaccagtg ggtcaatgaa gagattaaga agaaaattaa aaattttctt 120
gaaacaaaca acaatgaaaa caaaatatag aaatcctatg ggatacagtg aatgcagtac 180
taaaaggaaa gtttatagtc ataagtgcct aaatcaaaaa atggaaaaac ttcaaataag 240
ccatgaaatg atgcatctta aaaaagtaaa aaagtaatat caatctaaag tcaaagttag 300
tagaataaaa tgagatcaga gtagaagtaa atggaattga aatgaaaata atacaaaaga 360
tcaatgaaac aaaaagctgc attaaaaaat 390

<210> 2227
<211> 336
<212> DNA
<213> Homo sapiens

<400> 2227
ttggtgggaa attcaatact ctaagcatta gactgttgat ctagaatatt aacagatgaa 60
cactgtattt aaactgcaca taggaccaaa tggacctaac agatatttac agaacatttc 120
atctgacagt tacagaacaa acattcttct catcagcaca tgaaacattc tccagaagag 180
agcatatgtt aggacacaaa gcaagtctca acaaattaaa aaaattgaaa tcatattgtt 240
tcttctcaga ccacaataaa ataaaactag aaatcaataa caagaggaac tagggaaact 300
gtacaaatac atacaaatta aacaacatac tcctgg 336

<210> 2228
<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(384)
<223> n = A,T,C or G

<400> 2228
cgttgctgtc gaattcggct ggcgtttccg agaccgcgga ctcccgtagg gtccccgtgg 60
ccccgagttg tagtcgggac accccggccg cgggtgatcg tcgggtctcc acgcgcccgg 120
gtcgctgacg cggatccggc ctcggcgcct tctcagggcg ccctgcaagg ccgcaggcag 180
gatgaacatt ctggcacccg tgcggaggga tcgcgtcctg gcggagctgc cccagattta 240
agatctccaa ggtcattgtg gtgggggacc tgtcggtggg gaagacttgc ctcattaata 300
ggttctgcaa agacaccttt gataagaatt acaaggccac cattggagtg gacttcgaga 360
tggaacgatt tgaggtgctg ggcn 384

<210> 2229
<211> 381
<212> DNA
<213> Homo sapiens

<400> 2229
tcagtagcat ttctataggc caacagtgaa caatatgaaa atgaaatttt aaaaagtaat 60
cccatgtaca ataaccacac ataaaattaa atacctagga attaacttaa ccaaagaagt 120
gaaagatctc tataataaaa actataaaac gctgatgaag gaaattgaag aaaataccaa 180
aaaatggaaa aacattccat gttcatgtgt tggaagaatc aatgttgcta aaatgtccac 240
actaccctaa gcaatctaca gattcaacgc agtccctatc aaaatactgg acatttttca 300
cagaaataga aaaaacaatt ctaaaattta tatgaaacca cagaagaccc agaatagcca 360
aagctaccct aagcaaaata a 381

<210> 2230
<211> 450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(450)
<223> n = A,T,C or G

<400> 2230
gtactggctt ttgaaaagac ccnacgaaag ctcgcgngnn nttttgtgcg aagcggccta 60
cggtttttag aagacaacag aagggtggta aaatcactga ggctttacca aaaggttatg 120
gggacaatgc acctaaaaaa atcagcagtt tacaaatgga taacttgtaa caagggaaaa 180
gatgacgtta aagatgaagg ctgcagcagc aggacatcca catcaatttg caaggaaaga 240
aattaatcct ctttgtgccc taactgaaga gtcagccagg tgtggtggct catgcctgta 300
ataccagcac tctgggaggt caaggcaagt ggatcacttg aggtccagag tttgagacca 360
gcttggccaa cctggtgaaa tccattctct actaaaaaaa tacaaaaatt atccattcat 420
ggtggcgcac gcctatatgt ccatctactt 450

<210> 2231
<211> 275
<212> DNA
<213> Homo sapiens

<400> 2231
tttatcaaag tcccacgttc ccaggaggag cctgggaagg ggtccttttg gcgaatagac 60
cctgcctctg aagccaagct cgtggaacag gcattccgga aacggaggca gaggggtgtc 120
tcctgcttcc gcacccccct cgggcctctg tcctcaaggt aaagttctct gagcgcccgt 180
cctccagctg ttaggaaagc tgagctgccc tggagtttag agatacgtgg cgcagtcagc 240
cctccggatc tgtgggctca ggctcagtgt acggg 275

<210> 2232
<211> 400
<212> DNA
<213> Homo sapiens

<400> 2232
cgttgctgtc gattttaaca agctctttgc tagagagact gcagtgacag atggttggga 60
gtttgccccc aaagctgtga caccaatctt ctaatgagca tatttgttct gggtcgccct 120
gccagattct ttctctattt cagaaaggga caacagaata agtgacttca aaagaagacc 180
atgaggaaga gatggatgaa gatatataag acttagatca ctatgagatg aaagaagagc 240

ctattattga gaacaagttg gaggatgaag gaactgaata agaaaattgg gcaatattat 300
agaaaattag gaagactgaa aggttgaccc tgatagtcct ttgcacagtg atctttatat 360
cttaacaaga agcgatagga gacattcttg ttatctttca 400

<210> 2233
<211> 337
<212> DNA
<213> Homo sapiens

<400> 2233
gatgcccata agatatggga agctatgtta tcaagccata ttagatatca agcattaata 60
tggaaataaa ccagcctgtt tggtgggctc ttcacatgga cgcgcatgaa atttggtgcc 120
gtgactagga tcgggggacc tcccttggga gatcaatccc ctgtcctcct gctctttgct 180
ccgtgagaaa catgcaccta tggcctcatg ttctcaaacc gaccaaacca agaaacatct 240
caccaatttt aaatccgcct ggcttgtgag gccttttgac cccaattcaa gtcttttgat 300
accctgtgaa ttgcacccat actgcccaga tggctag 337

<210> 2234
<211> 341
<212> DNA
<213> Homo sapiens

<400> 2234
agacacactg aagcattgca tttgaatcat aattatgaac catttaaaaa ttggggattt 60
atttttaat tatgaaaaat tctgttgtaa tagtaccaca tccaatttat atgttattag 120
ctgtttgtta cccactattt cattatattg gaatgagggc aaataatcct gtaggcaagc 180
acgatatttt aaaagttagg aattctgaca catctcaact tttaaatcta atagattgat 240
atgctgctga aagaatattt actctctgga gacatatctg aagctgaaca ttgccttaag 300
gaactggaag tacctcattt tcaccatgag cttgtatatg a 341

<210> 2235
<211> 144
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(144)
<223> n = A,T,C or G

<400> 2235
tgcgtgtgga agactacgaa ccttacccgg atgatggcat ggggtatggc gactacccga 60
agctccctga ccgctcacag catgagagag atccatggta tagctgggac cacccgggcc 120
tgaggttgaa ctggggtgaa cccn 144

<210> 2236
<211> 393
<212> DNA
<213> Homo sapiens

<400> 2236
ggcacgaggg agctggatga tgacatggac gggacggtct cggtgactga gctgcagact 60
cacccggagc tggacacaga tggggatggg gcgttgtcag aagcggaagc tcaggcactg 120
cccaccgacc ttccagcacc ttctgcccct gacttgacgg agcccaagga ggagcagccg 180
ccagtgccct cgtcgcccac agaggaggag gaggaggagg aggaggagga ggaggaagaa 240
gaggctgaag aagaggagga ggaggaggat tccgaggtgc agggggagca tcccaaggag 300
gccccaccgt cactgtcacc cccgcagccg ggcagccctg ctgaggaaga caaaatgccg 360

ccctacgacg agcagacgcc ggccttcatc gat 393

<210> 2237
<211> 312
<212> DNA
<213> Homo sapiens

<400> 2237
cattatcact atagaaaacc acccaatcac aaaaattaac aataagagag gaagtaagta 60
atgaaggata tacaaaacaa ctaaaaaaca atcagtaaaa taacaagagt atgccctcat 120
ctatcaataa taatcttgaa tgtaaacaga ttacattccc catttaaaag ataaagactg 180
actgaatgga taaaagacat gacccaacta tatgctgcct agaagaaact cacctcacat 240
gtaaagacac acatagactg aaaataaagg aatggaaaaa tatattccac ccaaatggaa 300
accaaaagta ag 312

<210> 2238
<211> 391
<212> DNA
<213> Homo sapiens

<400> 2238
gttgctgtcg cttgtggatt gtaagtggct gacgctgagt gaggttatga agctgctgaa 60
gagctttggc gaggacgaga tcgagatgaa agtcgtgagc ctcctggact ccacatcatc 120
catgcataat aagagtgcca catactccgt gggaatgcag aaaacgtact ccatgatctg 180
cttagccatt gatgatgacg acaaaactga taaaaccaag aaaatctcca agaagctttc 240
cttcctgagt tggggcacca acaagaacag acagaagtca gccagcacct tgtgcctccc 300
atcggtcggg gctgcacggc ctcaggtcaa gaagaagctg ccctcccctt tcagccttct 360
caactcagac agttcttggt actaatgtga g 391

<210> 2239
<211> 382
<212> DNA
<213> Homo sapiens

<400> 2239
cgttgctgtc ggcggacgct cccgcggagc ggaaacctca ttgtggtgga gagcgtgctc 60
atggcagtgg ccttcctggc catgctgctg gtgctgggtt tgtgcggagc cgcttaccgg 120
cccacggagg agatcgatct gcgcagcgtg ggctggggca acatcttcca gctgcccttc 180
aagcacgtgc gtgactaccg cctgcgccac ctcgtgcctt tctttatcta cagcggcttc 240
gaggtgctct ttgcctgcac tggtatcgcc ttgggctatg gcgtgtgctc gggggggctg 300
gagcggttgc cttacctcct cgtggcttac agcctggacg cctcagccgc ctcactcctg 360
ggcctgctgg ccctggggct cg 382

<210> 2240
<211> 370
<212> DNA
<213> Homo sapiens

<400> 2240
ggattagaaa cagctcaata cacccacacc agaagaccta ggataaattc tgggaagcat 60
gcaacctccc aagataaacc aagaagatat taaagccctg aaaagatgaa taatgagctc 120
caatattgaa tcagtcatta taaacctacc aaccagagaa agccctggac cagacagatt 180
cacagctaaa ttataccaga tgtataaaga agagctgata gaaatcctac tgaacatatt 240
ccaaaaaatc aaggaggaat aattcctcca taactcattc tatgagacag catcattcag 300
aaacacggtg ataaaaggaa tctttaggcc aaaatcttgg aggaacatag atgcaaaaat 360
cctcaaccag 370

<210> 2241
<211> 400
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 2241
ggcacgagga gaagctgacg ggcatgtggt ggaaacagct ggtggccggc gcagtggcag 60
gtgccgtgtc acggacaggc acggcccctc tggaccgcct caaggtcttc atgcaggtcc 120
atgcctcaaa gaccaaccgg ctgaacatcc ttgggggget tcgaagcatg gtccttgagg 180
gaggcatccg ctcccctgtgg cgcggcaatg gtattaatgt actcaagatt gccccegagt 240
cagctatcaa gttcatggcc tatgaacaga tcaagagggc catcctgggg cagcaggaga 300
cactgcatgt gcaggagcgc ttcgtggctg gctccctggc tggtgccaca gcccaaacca 360
tcatttaccc tatggaggtg ctgaagacgc agctgacctn 400

<210> 2242
<211> 368
<212> DNA
<213> Homo sapiens

<400> 2242
ggaagtagaa cattctgaag ggcatgtcac acgttcttca agctcactct gccagccact 60
ggagaatgga cgtaatgagc caaggatggc accaggaagt cacgggggca gtgtttgctg 120
ctgtccaggc aatcacagta ttggtgtcgt gtctcagcag gctgggtgtt gggggcctgg 180
attcacaaca tacatttgaa catattgtca cccgtgcttg ctgatagaga catctctatg 240
gagtggaggt ggcgaatgtt gcgtcgaagt ctttgccttt ttattattta tattctcttg 300
ttggggggac tactccttat attttcttct ctcttcgctg ttacggaggg tgacatctta 360
tttttttt 368

<210> 2243
<211> 385
<212> DNA
<213> Homo sapiens

<400> 2243
ggcacgaggg acctcctacc gttacttttt tattcactca agaaatgatt tcttgagttc 60
ccggcctttg ttagagagat gaacgaggca cggtccgtgt ccagctaaag gacagtagga 120
ctggaagagc gttgtttttcc aaggtacagg atgccgcgcc tcctaggagc cgaagggacg 180
ggaggccgcg tagaggaggg gaccgtcccc gagcctcgcc gagcctgcgg tgtagacacc 240
tctggtgtct agtggttgag gatctgttga ccgggcatgg tgggtagaag gaacgctccg 300
agcagaagaa aagtggctgt cgtgaagaca tctgcgtgtg cggcgtgcgt gggtgcctgg 360
agatgaagct ggaaagagct gctgc 385

<210> 2244
<211> 344
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(344)
<223> n = A,T,C or G

<400> 2244
gagaacattc tgaagggcat gtcacacgtt cttcaagctc actctgccag ccactggaga 60
atggacgtaa tggagccaag gatggcacca ggaagtcacg ggggcagtgt ttgctgctgt 120
ccaggcaatc acagtattgg tgtcgtgtct cagcaggctg ggggttgggg ccctggattc 180
aaagcatcca tctgaacata ttgtcacccg tgcatcctga gagagacagc ttcatggagt 240
ggaggtgtgt ggcctggagg ccccacgtan gccaccaggc atgttttcca cgaaaaccga 300
aacttctgac gggattacta acattgggag atttccgttt cttg 344

<210> 2245
<211> 396
<212> DNA
<213> Homo sapiens

<400> 2245
ggcacgagga gaagctgacg ggcatgtggt ggaaacagct ggtggccggc gcaatggcag 60
gtgccgtgtc acggacaggc acggcccctc tggaccgcct caaggacttc atgcaggtcc 120
atgcctcaaa gaccaaccgg ctgaacatcc ttgggggggct tcgaagcatg gtccttgagg 180
gaggcatccg ctccctgtgg cgcggcaatg gtattaatgt actcaagatt gcccccgagt 240
cagctatcaa gttcatggcc tatgaacaga tcaagagggc catcctgggg cagcaggaga 300
cactgcatgt gcatgagcgc ttcgtggctg gctccctggc tggtgccaca gcccaaacca 360
tcatttaccc tatggaggtg ctgaagacgc ggctga 396

<210> 2246
<211> 314
<212> DNA
<213> Homo sapiens

<400> 2246
gaccgtttat gtaactttat attgggacaa tgaatccttt gaggccactt gcctaccgag 60
ccggttgatc gctgaggagc cactatttag actctattaa actttcttgt tgcccgcgga 120
accctctaaa tccccttgta aatttaactg ttagtccaaa gaggaacagc tctttggaca 180
ctaggaaaaa accttgccga gagagtcccc accttaaagg ggcgcaaaaa aaacggttgg 240
ggggtaattt tgggagacct ccctgttttt taaaccacta tttagtggga aaaaacccct 300
tttaaaaggc gggg 314

<210> 2247
<211> 364
<212> DNA
<213> Homo sapiens

<400> 2247
actgaattac aataatgaca caacctatct aaacctgtgg gatacagata acgcggggct 60
aagaggaaag ttcacagccc taaatgccta catcatagtc tgaaagagca caaacagaca 120
atcccaagtc acacttcacg gaactagaga aacaagaaca agccataccc aaacccggac 180
ccagcagaag aaaagaaata acccagatca gagaagaact aaatgaaaat gatgcaaaat 240
acttacctaa gataaatgag acacaactgg ttctttgaaa agataaataa aattataaac 300
tgttagcaag actaaccacg aaaagaagaa aaaaaggcca ataaccttgc tgagtaatga 360
accc 364

<210> 2248
<211> 311
<212> DNA
<213> Homo sapiens

<400> 2248
caagcttaac cataagtaca ataagcccca gcatttgcat ggtagtcaag ctcattcaag 60
caaaactctc tccagtaggg aatttccccc gcagagacca tgtgcatttt tatttcactt 120

gtcctcagac tgactctttg ttcattataa tagtaaaaaa cacatccctg ggtggagatt 180
tagagctaat aagacatgcg atgtatgaac aagcatgtaa agctactgca catgtgcagc 240
caaagaacca cccataacat gcttaccagc aacactcttt cccacccccc taagaataac 300
cacggaaggc t 311

<210> 2249
<211> 123
<212> DNA
<213> Homo sapiens

<400> 2249
actccccgcc ctaagatctc tgtgtgtgtc ctgggggacc agcagcactg tgacgaggct 60
aaggacgtgg atatccccca catggacatc gaggcgctga aaaaactcat caagaataaa 120
aaa 123

<210> 2250
<211> 127
<212> DNA
<213> Homo sapiens

<400> 2250
tagaatcttt ggaggtctgg acatgttagc tgaaaaactc aaatctcaca catctaaact 60
taagtggaaa taaactgaaa gatatcagca ccttggaacc tttgaaaaag ttagaatgtc 120
tgaaaag 127

<210> 2251
<211> 348
<212> DNA
<213> Homo sapiens

<400> 2251
ggctcactgc aacctccacc tcctgggttc aagcgattct cctgcctcaa cctcctgagt 60
agctgggact aactacaggt gcgtgccacc atgcccagct aatttttcta tttttagtag 120
agacggtttt caccatgttg gccaggaagc gccttaattg tgtgaatctt gatgacatgc 180
gagatcagct tccagagcat ggctctatat gctgacgccc ctgaaaacag atccctgtta 240
ctttaggcca agatgtgggg cgatatcatg tattctggaa cctggaccac aagagccccc 300
acgcaggccc ctaagatggt agattcttcg acgaagattc ctaccctc 348

<210> 2252
<211> 359
<212> DNA
<213> Homo sapiens

<400> 2252
actgaattac aataatgaca caacctatca aaacctctgg gatacagcta aggcggtgct 60
aagaggaaag ttcacagccc taaatgccta catcaaagtc tgaaagagca ccaatcagac 120
aatcccaagt cacacttcaa ggaactagag aaacaagaac aagccaaacc caaacccata 180
cccagcagaa gaaaagaaat aaccaagatc agagaagaac taaatgaaaa tgaaacataa 240
taaatacaaa agataaatga aacaaaactg gttctttgaa aagataaata aaatttatag 300
actgttagca agactaacca agaaaagaag agagaaagtc caaataacct cactgagtg 359

<210> 2253
<211> 154
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(154)
<223> n = A,T,C or G

<400> 2253
cananggctt gttttggacc acagaccacg gtatcctgat atgataaaaa gggcggagga 60
tgcatacatc ctcacttgta acgtgacatt agagtatgag aaaacagaag tgaattctgt 120
ctttttttac cagagggcac aacattgaga aaaa 154

<210> 2254
<211> 401
<212> DNA
<213> Homo sapiens

<400> 2254
ggcacgagcc ctcttcccat gaggtggtag cctggattcg acggatactt cgggtggaga 60
agacagggca cagtggtact ctggatccca aggtgactgg ttgtttaatc gtgtgcatag 120
aacgagccac tcgcttggtg aagtcacaac agagtgcagg caaagagtat gtggggattg 180
tccggctgca caatgctatt gaaggggga cccagctttc tagggcccta gaaactctga 240
caggtgcctt attccagcga ccccccactta ttgctgcggt aaagaggcag ctccgagtga 300
ggaccatcta cgagagcaaa atgattgaat acgatcctga aagaagatta agaatctttt 360
gggtgagttg tgaggctggc acctacatcc ggacattatg t 401

<210> 2255
<211> 124
<212> DNA
<213> Homo sapiens

<400> 2255
gcagtggacg tggatttggt gatggctaca atggttatgg aggaggacct ggaggtggca 60
attttggagg tagccccggt tatggaggag gaagaggagg atatggtgct ggaggacctg 120
gata 124

<210> 2256
<211> 124
<212> DNA
<213> Homo sapiens

<400> 2256
ggtttttcag ctcacttcaa gggtacctga agcgaattgg caccaaagca gcagctgtat 60
tggcgcagtt ctagcttcac cttcacgatg tttcccttgg tcaaaagcgc actaaatcgt 120
ctct 124

<210> 2257
<211> 147
<212> DNA
<213> Homo sapiens

<400> 2257
ggagaatcga ggcactcgct ggcgtaccca tgtatcgaaa tgagttcacg gcctggtacc 60
ggcggatgtc ggtggtctac gggatcggca cctgggctgt gttgggctca ctgctttact 120
atagccggac aatggcgaag tcgtcag 147

<210> 2258
<211> 341
<212> DNA
<213> Homo sapiens

<400> 2258
gttctgtcgc ccaggctgaa gtgcagtggc atgatcccgg ctcactgtag gctccgtctc 60
cccagttcac accattctcc tgcctcagcc taccgagtat gcacccgcca gcatgcctgc 120
gtggccgagt tcttctcatt cggcatcaac agcattttat atcagcgtgg catatattca 180
tctgaaacct ttactcgagt gccgaaatac ggactcacct tgcttgaact actgatcttg 240
agctcatata tacctaacta agggtcgcgc ccttcgaaat atgatttact atcttgccta 300
gcattctgga gctctctagc acattctggt ttctactatg t 341

<210> 2259
<211> 363
<212> DNA
<213> Homo sapiens

<400> 2259
cgaaccacaa tagtgacaca tcctatcaca atctttggga cacaccagag gcagtgctaa 60
caggaaagtt catagcccta cacgcctacc tcaaaagggc tgaaagagca tctacagaca 120
atctaaggtc acacctcaag cggctagaga aacaagaaca accaaatcct cacccagctg 180
aagaaaggaa atagcctgga tccgagcaga actagatgaa attcagacaa acaaactcca 240
cttgcgctcc aaaaatacgt aagacgaaga gctggttctt tgaaaagata aataaaattg 300
atagaccatt agcaagatta accaggaaaa gaagagtgaa aattcttata agctcaatga 360
gaa 363

<210> 2260
<211> 348
<212> DNA
<213> Homo sapiens

<400> 2260
cggcctactg ctgcaagaag acaacagaag gctactgctg caagaagaca acagaaggct 60
gctgctgcaa gacgacaaca gaaggctact gctgcaagaa gaccacagaa ggctacggct 120
gcaagaagac aacagaaggg tactgctgcg aagaccacag aagggtactc ctgccagaag 180
acgacagaag ggggagcgcc gctcctgctg caccgtgctt gctacgagtt tcatgctcgt 240
gctaaactag cgccgtcgtc ttctttcttc agtcgtcatg atgattatct accgccacct 300
catcacccac gatgagatgt tctacgacat ctacaagatg caggagat 348

<210> 2261
<211> 393
<212> DNA
<213> Homo sapiens

<400> 2261
cgttgctgtc ggtgcatcct ctcccagtgg atgcgatcac ctgtgcctcc cctccccttt 60
tattcacatc gcgtattttg gcattttcca gataatgaca aggcacagac agggtggggg 120
atggactgaa gcaccatgtc ttgtttactg gctcctaatt tattttcatt ctttgttgac 180
taaccacaca tgtgccctcg gaggttacat gtgtggtgac cactctacat tctggatgtt 240
ttattaaaca ttgaacgcgc ctacgaggag cgaacttaaa ataatacatc cactggctga 300
taaagggaag ctgcaatacc aaggcgaaga ttgataatgc acacgctttt ctttttgta 360
ccgtacatat tttcacacca tcttagatat aat 393

<210> 2262
<211> 408
<212> DNA
<213> Homo sapiens

<400> 2262
ggcacgaggt gtgcttaggt gcccgagcta ctgagggtct aagtccgggc agccgaagag 60

tgtggtaggt aacggtcctc agcgcaaggg tcatttcgtc gctgggaagg gacggccctc 120
gcccgcggtg atggtggtta gcaagatgaa caaagatgcg cagatgagag cagcgattaa 180
ccaaaagttg atagaaactg gagaaagaca acgcctcaaa gagttgctga gagctaaatt 240
aattgaatgt ggctggaagg atcagttgaa ggcacactgt aaagaggtaa ttaaagaaaa 300
aggactagaa cacgttactg ttgatgactt ggtggctgaa atcactccaa aaggcagagc 360
cctggtacct gacagtgtaa agaaggagct cctacaaaga ataagaac 408

<210> 2263
<211> 357
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 2263
atgacctcaa cggtgccgtg atgatacaat accacctatg gagaaagctc tagggaaaat 60
ggacattcag atagctcttc cttctggatg gtacagaaga gtagctccat ggtttggatt 120
agctgcaaaa cactttattg atagatgaag attactgagg aaatgttggt gctgtactgt 180
ttaattttgg caaaaaaaag tttaaagtca gaaaaagtga tcgtactgca cagctcattt 240
gtgaatgaat ttttaatcca gaaatagaag ttcaagcttt ggatgatgct gaaaggcatt 300
cagaagagtt aggttctatt agaaagtatt aaaatttatg ctaagaatag aaaatgn 357

<210> 2264
<211> 399
<212> DNA
<213> Homo sapiens

<400> 2264
atcccatcga ttcgaattcc gttgctgtcg actgggaaac tgcacctcgt cacatgatgc 60
gtctagatat tcgttctttg ctgcaagatg ctgctattga agaggtagag atggaagatt 120
ttgatgcaaa tatcgaagaa cagaaagaag aaaagaaaga tgcagaggaa gaggaaagcg 180
aactgggtta cattccgaaa agcaaatggg agatggacac atctgaggca aagctagaca 240
agttggatgg cttgaggact ggtactaaaa ggaaacgtga ctgggaggcc attgccagca 300
gaatggagga ttatcttcag ctccccgatg attatgatac tcgtgcttct gagcctggga 360
agaagagggt cagatgggca gacctggaag agaagaagg 399

<210> 2265
<211> 322
<212> DNA
<213> Homo sapiens

<400> 2265
gcctcagcct ccctagtagc tgggatgaca ggcgcctgcc atcatgcctg actaattttt 60
gtatttttag tagagacggc gtttcaccat gttggccagg ctggtctcaa actcctgacc 120
tcaggtgatc cgcctacctc agcctcccaa agtgctggga ttacaggcgt gatccaccac 180
acctggcccc tgcaatcttc tactttaagg tttgcagaga taaaccaata aatccacacc 240
gtacatctgc aatatgaatt caagaaagga gatagtacct tcaatactta gaaatagtct 300
tccacaaaaa atactttatt tc 322

<210> 2266
<211> 329
<212> DNA
<213> Homo sapiens

<400> 2266
attgatagac cattagcaag attatcgaga aaagaataca gaaaatccaa ataagctcaa 60
ttagaaacaa aacaggagat actacaactg acaccactga aatataaaag atcatttcaa 120
ggctactatg aacaccttta catgcataaa ctataaaacc taaaggagat ggataaattc 180
ctggaaaaat aaccaccctc ctagcttaaa tcaggaagaa ttaaataccc ttgacagacc 240
aattaccaac cgagaggatg aaatggttac caaaaaaaat taccaatgga aaaagccagg 300
accacaccga ttcacaggtg aaatttatg 329

<210> 2267
<211> 230
<212> DNA
<213> Homo sapiens

<400> 2267
gtagtaccat gcacattatt gaggaatgct ctaaaggtat atctctcggg gtatttctct 60
acttacctgt gataatgctt ttgtcttaat agggtggttc tcttccctaa gcgctagcca 120
aattcatgaa ttatgtgaag aattgctttc ggatgactga ccaagaggct attcaagatc 180
tctggcagtg gaggaagtct ctttaagaaa atagtttata caatttgtta 230

<210> 2268
<211> 323
<212> DNA
<213> Homo sapiens

<400> 2268
gactggaaag cgaaggctct cctgaaactc ttacaaactt aaggaaagga tacctgttta 60
tgtataatct tgtgcaattc ttgggattct cctggatctt tgtcaacctg actgtgcgat 120
tctgtatctt gggaaaagag tcctttttatg acacattcca tactgtggct gacatgatgt 180
atttctgcca gatgctggca gttgtggaaa ctatcaatgc agcaattgga gtcactacgt 240
caccggtgct gccttctctg atccagcttc ttggaagaaa ttttattttg tttatcatct 300
ttggcaccat ggaagaaatg cag 323

<210> 2269
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 2269
ggggccctgt gtctggaggc tgcatgaatc ccgcccgtgc ttttggacct gcggtggtgg 60
ccaaccactg gaacttccac tggatctact ggctgggccc actcctggct ggcctgcttg 120
ttggactgct cattaggtgc ttcattggag atgggaagac ccgcctcatc ctgaagcctc 180
ggtgaagcag agctcgtggg attcctgctg ctccaggtgt cctcagctca cctgtcccag 240
actcaggaca ggggagttcc tgcatttcct gccagggcag aggcccagag gagcgacccc 300
ctgcttccac tgcttgn 317

<210> 2270
<211> 316
<212> DNA
<213> Homo sapiens

<400> 2270
gcattgggtc aaaaacaaaa tgaagatgga attaaaaaaa ttatttgaac tgaatgacag 60

taaggacaat aatgacctct gggatacagc aaaggcagtg ctaacaggaa agttcataga 120
cttaaattcc tacatcaaaa agtctgaaag attgcaaata gacaatctaa gatcacacct 180
caaagaacta gagaaacaaa aacaaaccaa acccaaaccc agcagaagaa aggaagtaac 240
cacgatcaag cagaactaaa tgaaattgaa acaacaacaa aaacaataca aaagataaat 300
gaaacaaaaa gctagt 316

<210> 2271
<211> 322
<212> DNA
<213> Homo sapiens

<400> 2271
gcattgggtc aaaaacaaaa tgaagatgga attaaaaaaa ttatttgaac tgaatgacag 60
taaggacaat aatgacctct gggatacagc aaaggcagtg ctaacaggaa agttcataga 120
cttaaattcc tacatcaaaa agtctgaaag attgcaaata gacaatctaa gatcacacct 180
caaagaacta gagaaacaaa aacaaaccaa acccaaaccc agcagaagaa aggaagtaac 240
cacgatcaag cagaactaaa tgaaattgaa acaacaacaa aaacaataca aaagataaat 300
gaaacaaaaa gctagttctt tg 322

<210> 2272
<211> 326
<212> DNA
<213> Homo sapiens

<400> 2272
ggcgtcgtag tctcctgcag cgtctggggt ttccgttgca gtcctcggaa ccaggacctc 60
ggcgtggcct atcgagttat ggcgacgaag gccgtgtgcg tgctgaaggg cgacggccca 120
gtgcagggca tcatcaattt cgagcagaag gaaagtaatg gaccagtgaa ggtgtggccg 180
atgtgtctat tgaagattct gtgatctcac tctcaggaga ccattgcatc attggccgca 240
cactggtggt ccatgaaaaa gcagatgact tgggcaaagg tggaaatgaa gaaagtacaa 300
agacaggaaa cgctggaagt cgcttg 326

<210> 2273
<211> 130
<212> DNA
<213> Homo sapiens

<400> 2273
aacataacca ttcttaattt aactgtttat attatcctaa ctactaccgc attcctacta 60
ctcaacttaa actccagcac cacgacccta ctactatctc gcacctgaaa caagctaaca 120
tgactaacac 130

<210> 2274
<211> 406
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(406)
<223> n = A,T,C or G

<400> 2274
cgttgctgtc gccggggcgg aggagaggac ctccttggtt cctttggttc tgtcagtgag 60
ccccttcctt ggccatgaag ctcgtgagca agaacatcga gaaggacaat gcgggccagg 120
tgaccctggt ccccgaggag cctgaggaca tgtggcacac ttacaacctc gtgcaggtgg 180
gcgacagcct gcgcgcctcc accatccgca aggtacagac agagtcctcc acgggcagcg 240

tgggcagcaa ccgggtccgc actaccctca ctctctgcgt ggaggccatc gacttcgact 300
ctcaagcctg ccagctgcgg gttaagggga ccaacatcca agagaatgag tatgtcaaga 360
tgggggctta ccacaccatc gagctggagc ccaaccgcca gttcan 406

<210> 2275
<211> 245
<212> DNA
<213> Homo sapiens

<400> 2275
tgatttctgt ggatcccagc ttggttccag gaattttgtg tgattggctt aaatccagtt 60
ttcaatcttc gacagctggg ctggaacgtg aactcagtag ctgaacctgt ctgacccggt 120
cacgttcttg gatcctcaga actctttgct cttgtcgggg ggggggtgag ctcccatgtc 180
tacgagcaca gggggtcttt ggctatccgg cctgataggt ggtatcgtta catcctcttg 240
tgctg 245

<210> 2276
<211> 375
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(375)
<223> n = A,T,C or G

<400> 2276
tgagccaggc atggtggtgc atgcctataa tcccagctac ttgggaggct gaggcaggag 60
aactgcttga acccgggagg tggaggttgc agtgagtcaa gatcgcgcta ttgcactcca 120
gctctgggca acagagcaag actccatctc ggggaaaaaa gcaaaacaaa acaaaacaaa 180
aatcaaaaac ataaataaag tgtgacaggg tgtcctacta tgcagtagag taacacatca 240
gaaaaaacaa aataggctgg gcacattggc tcatgcctgc aatcctagcc ctttgggtgg 300
ctgagtgggg gcgggtccct tgagctgagg agttggagac cagcctgtgc accaaaacac 360
aaccttgtct ctacn 375

<210> 2277
<211> 394
<212> DNA
<213> Homo sapiens

<400> 2277
cgttgctgtc ggtttcacca tgttggccag gctggtctcg agctccgacg tgctggtggt 60
ggtggtttcc atgctgagca ccgccccca gcccatccgc aacatcgtgt tccagtcagc 120
tgtccccaag gttatgaagg tgaagctgca gccaccctcg ggcacggagc tgccagcttt 180
taaccccatc gtccaccct cagcaatcac ccaggtcctg ctgcttgcca acccccagaa 240
ggagaaggtt cgcctccgct acaagctcac cttcaccatg ggtgaccaga cctacaacga 300
gatgggggat gtggaccagt tcccccccacc tgaaacctgg ggtagcctct ataacagagg 360
ggctggggag aggaaggggc agagggaccg gtca 394

<210> 2278
<211> 149
<212> DNA
<213> Homo sapiens

<400> 2278
gaggttctgg gaagatggcg aaggtctcag agctttacga tgtcacttgg gaagaaatga 60
gagataaaat gagaaaatgg agagaagaaa acttcagaaa tagtgagcaa attgtggaag 120

ttggtgaaga attaattaat ggagatgcg 149

<210> 2279
<211> 218
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(218)
<223> n = A,T,C or G

<400> 2279
aacactgaac tgacaattaa cagcccaata tctacaatca accaacaagt cattattacc 60
ctcactgtca acccaacaca ggcatgctca taaggaaagg ttaaaaaaag taaaaggaac 120
tcggcaaatc ttaccccgcc tgtttaccan angagatata aaaaaattta aanggggggg 180
gcgttttttt ttttttccg acctgtgaaa atattttt 218

<210> 2280
<211> 141
<212> DNA
<213> Homo sapiens

<400> 2280
gaactgacaa ttaacagccc aatatctaca atcaaccaac aagtcattat taccctcact 60
gtcaacccaa cacaggcatg ctcataagga aaggttaaaa aaagtaaaag gaactcggca 120
aatcttaccc cgcctggtta c 141

<210> 2281
<211> 325
<212> DNA
<213> Homo sapiens

<400> 2281
atgttagctg agtgatggcc aagtttttc tctggacagt aatgtaaatg tcttactgga 60
aatgacaagt ttttgcttga ttttttttt taaacaaaaa atgaaatata acaagacaaa 120
cttatgatag atcaggggtg ttgttatgtt tttttaattt aaaaatgcaa ccctgccccc 180
tccccagcaa agtcacagct ccatttcact aaaggttgga gtcaatatgc tctgactgac 240
aggcaaccct gtagtcatgg agaaaggttt ttaaagatct agtccaatct ttttctagag 300
aaaaagataa tctgaaactc acaaa 325

<210> 2282
<211> 359
<212> DNA
<213> Homo sapiens

<400> 2282
gtgacacaac ctatggaaac ctctgggata cagcaaaatt gatgctaaga agaaagttca 60
tggcattaaa tgcctacatc aaagagtctg aaagaacaca aatagacgat ttaaggtctc 120
acttcaaggg actagagaat caagaacaaa caaaacccaa acccagcaga agaaataaga 180
tcagagcaga actaaatgaa attaaaacaa aacaaataca taggacaaat gaaacaaaaa 240
gctcgttatt agaaaagata aacaaaatta atagactatt atcaagatta accaagaaaa 300
gaagagagaa gatcgcaatg ggctcaatta gaaacaaaac aggagatatc acaaccaag 359

<210> 2283
<211> 376
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(376)
<223> n = A,T,C or G

<400> 2283
cgttgctgtc gctgccaggg cgctccgacg tgctggtggt ggtggttccc atgctgagca 60
ccgccccccа gcccatccgc aacatcgtgt tccagtcagc tgtccccaag gttatgaagg 120
tgaagctgca gccaccctcg ggcacggagc tgccagcttt taaccccatc gtccacccct 180
cagcaatcac ccaggtcctg ctgcttgcca acccccagaa ggagaaggtt cgcctccgct 240
acaagctcac cttcaccatg ggtgaccaga cctacaacga gatgggggat gtggaccagt 300
tccccccacc tgaaacctgg ggtagcctct aaaacagagg ggctggggag aggaaggggc 360
anagggaacc ggcact 376

<210> 2284
<211> 150
<212> DNA
<213> Homo sapiens

<400> 2284
gaactgacaa ttaacagccc aatatctaca atcaaccaac aagtcattat taccctcact 60
gtcaacccaa cacaggcatg ctcataagga aaggttaaaa aaagtaaaag gaactcggca 120
aatcttaccc cgcctggtta ccaaaaaaaa 150

<210> 2285
<211> 396
<212> DNA
<213> Homo sapiens

<400> 2285
cgttgctgtc ggtccggggc tatggctgtg actctggaca aagacgctta ttatcggcga 60
gtgaagagac tgtacagcaa ttggcgggtg aggaagatcc tgtaattttt cctagggagc 120
ccccttagcc atcccataat aaccctgttt ctcggcgccc ttttttctct ttcggtcagg 180
aattcccggg ttctgtgcct caccctttтc gttgctcccg aatcattcac cggaggcggc 240
cacgaacgct gcccccttaac agggaatccc ccgcattcac cctgtcctgc ggccatcacc 300
atcttccccg cgtgccagcc ttggtcatgc atagcagcac ctctcgcagt ctcttcccgc 360
cctagaagag gcaacatcct tccctcctac tccgtg 396

<210> 2286
<211> 353
<212> DNA
<213> Homo sapiens

<400> 2286
gagagttcct ccttgctctg gcccctactc tttctggtgt tagatcgagc taccctctaa 60
aagcagttta gagtggtaaa aaaaaaaaaa aaacccccca accgctcgaa ccccaaaagg 120
ggagaaaatt ttttgggac atcctcctgc ttttcccgat actgaacgtt ggctccctaa 180
agcccttcgg gaagcttttt tttcctaaaa ggaaaaaatc acccccggg aaaatcgggc 240
tgattacagg acctggcctg ggaatgggaa aactgccggc ctataaattt gctaaactaa 300
aaagcaagcg ggtttttgg aataaaaata accatggact ggaggaaaca ccg 353

<210> 2287
<211> 131
<212> DNA
<213> Homo sapiens

<400> 2287
tagtagacta cacaacagcg aaggaatttg ctgattccct tggaattccg tttttggaaa 60
ccagtgctaa gaatgcaacg aatgtagaac agtctttcat gacgatggca gctgagatta 120
aaaagcgaat g 131

<210> 2288
<211> 328
<212> DNA
<213> Homo sapiens

<400> 2288
ggaatccccg gcggcagtgg ggctgttgct gttgctgtgg ctgtcgctgc ccgtcaggct 60
gccttctttt gtcgtttccc agcgctgcgc aggacttctc ctggcggcgc tgcggatcca 120
gggggtcggc tgccaggtac aggggttgag gctgggcaaa cgccgcgaaa ctatcgctct 180
tccccgtccc gcttccgcgc ctgtccaccc tgggtaacgg aaccagcatc gcggtaggga 240
catcctcgct aggccccgcc ggaccattcc tcagggtggg ccctttccga agccgggacc 300
gctcctgctt gtcggcatcg ctcccccg 328

<210> 2289
<211> 385
<212> DNA
<213> Homo sapiens

<400> 2289
cgttgctgtc ggatgaaatt ggagctctgg ataatgcaga attggaaggt tctattcaag 60
tggacagcaa tcgcttacag gaagctttga atgactacta taaagagaac gcagacaacc 120
gtgtacaact gaataccctt gaacccttgg aggatcacga cctgcctatg aatgatctcg 180
acgactctga gaaggactac ttgaggactg tagaccttga gcaaacatat gagacgtggg 240
taacgctgtc atggacgcgg ttaaacagca caagccataa ctgttcacca ctattaccaa 300
aaacctaggg gtcgggacgg gaattgaaat ccgcgaaggc tccctagtct tccatagcct 360
taatcaatac aggccgaaca gagga 385

<210> 2290
<211> 334
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(334)
<223> n = A,T,C or G

<400> 2290
atatcaaaac ctccaggata ccgcaaaggc agtgctaaaa ggaaagttca tagcgttaaa 60
tgcctacatc cccaagtctg aaagagcaca aatagacaat ctaaggtcac acctcaagga 120
actagagaaa caagaacaaa ccaaacccca acccaaaccc agcagaagaa aagagataac 180
caacatgaga ccagaactaa atgaaattga aacaacaaca acaacaaaaa ccaacaaaaa 240
ataaataaaa cagaaagctg gttctttgaa aagataaata agattgatag aacattagca 300
agattaacca agaaaagaag agagaagatc cnaa 334

<210> 2291
<211> 426
<212> DNA
<213> Homo sapiens

<400> 2291

cgttggtgtc ggcattagtc actttgaaat gtaacaaatg gtactacaac caattccaag 60
ttttgatttt taacaccatg gcacctttg cacataacat gctttagatt atatattccg 120
cactcaagga gtaaccaggt cgtccaagca aaaacaaatg ggaaaatgtc ttaaaaaatc 180
ctgggtggac ttttgaaaag cttttttttt ttttttttt tgaaaaggga ttttttttt 240
ttccccggg tgggggggaa aaacaaaaat tgggtttaat ggcccctccg ttttttgggg 300
taaaaaaatt ggcgggctca ccccccgag gaggtggaaa taaggggcc cctttcccac 360
ccaaagttat ttttggtttt tttaaaaaaa agggggttc accattctgg ccaggctggg 420
tttaaa 426

<210> 2292
<211> 391
<212> DNA
<213> Homo sapiens

<400> 2292
cgttgctgtc gttttttttt aaatatgggt attggcgttt tttctttttt actctttcct 60
tcttaactca agacttgtag tgttgtaaac ctgcctcaca aaatacatgg aaataacttt 120
tctttaaaaa aaaaaaaaaa acagccttaa cccatttttt gggggcccac tttttgggca 180
aggatggaca ccaatttatt tccccccttgg ggcccccaaa aacttattta aatacccttt 240
tttaacccac ccttctcttt attataggga catgccctta aatggacaaa aaaggtttac 300
cctttggaat aaaaatgcag agcaggcaaa accattacac ctgtggcgaa aagttaaaag 360
ttagggaaaa accggggcag aggaaaaggg g 391

<210> 2293
<211> 331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 2293
ggcgacaaac ctaccgagcc tggtgatagc tggttgtcca agatagaatc ttagttcaac 60
tttaaatttg cccacagaac cctctaaatc cccttgtaaa tttaactgtt agtccaaaga 120
ggaacagctc tttggacact aggaaaaaac cttgcagaga gagtanaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaggggccc tttttttccg taaacccaac atggaaaaaa accttggggg 240
gtttgggcca ccccccctt aaagggcggg gaaaaaaggg tttttttgg aaaattgggg 300
aggttttggt ttttttggaa cccttaaag c 331

<210> 2294
<211> 235
<212> DNA
<213> Homo sapiens

<400> 2294
cagtagacac tgaggcctca cctcagactg ggcaaggagc agggagcata cctgggcccc 60
agcatcagca tcagcctgct cctccccaca cagcactcgg gccaggccct ctcccctgtc 120
cttcttaaac tccgcctggg aagacagaga aacatggaga gcaagagatg aaattactgc 180
tctgccctaa actgcaccca gagtctctga ttacagtcat actcttaccc cgtcc 235

<210> 2295
<211> 414
<212> DNA
<213> Homo sapiens

<400> 2295
cgttgctgtc ggggaaataa gaagaatgaa agcctctctt tctgtccgca gatcctgact 60
tttccaaagt gccttaaaag aaatcagaca aatgccctga gtggtaactt ctgtgttatt 120
ttactcttaa aaccaaactc taccttttct tgtttttttt ttttttttct ggggcccctc 180
cccttccggg caaggggggg ggtccttttt taaacccagg gaaaaaccgg ccccccccct 240
tggtggacga agggctctaa gggccccccc gggccccagg gcccacccgg gccccatttg 300
gcccgggtgg ttgcccggcc ccggaaaacc ccggggcccc ggttccttta cgggggattt 360
aggggcgggg ggtccaggga ccattccctt tcccggggag ttataccgcg aaag 414

<210> 2296
<211> 377
<212> DNA
<213> Homo sapiens

<400> 2296
ttgcaaaggc taaagagttg ggtgccactg aatgcatcaa ccctcaagac tacaagaaac 60
ccattcagga agtgctaaag gaaatgactg atggaggtgt ggatttttttg tttgaagtca 120
tcggttcggt cgataccatt actgccttcc ctgctatgat gtcattattc ttatatgttt 180
cgtacctctc tttgggtttc tcttgttttc ttaatttttc ctcttgactc tttctttggt 240
ctatctcccc acctctttta ttcctctttt cctttttttgt ataatactgt ctcctatcat 300
tcctttcttt atcttcaccc tctacgtcct tttctttggt ttaatccttc tgacttttttc 360
gtttcctctt ccgctct 377

<210> 2297
<211> 412
<212> DNA
<213> Homo sapiens

<400> 2297
ggcacgaggc agagccagcc cccgaccccg ggccacctgg gcccccgggt tccgccggca 60
ctctcgccac caccgcgtgg gtctgacaag atgtaccagg tcccactacc actggatcgg 120
gatgggaccc tggtacggct ccgcttcacc atggtggccc tggtcacggt ctgctgtcca 180
cttgtcgcct tcctcttctg catcctctgg tccctgctct tccacttcaa ggagacaacg 240
gccacacact gtgggccatc cacgaaaatg ctttcattgt gttcattgcc tcatccctcg 300
ggcacatgct cctcacctgc attctctggc ggttgaccaa gaagcacaca gtaagtcagg 360
aggtacggtc tatccctagc gggggctcca aggcagccca gaagataatt ag 412

<210> 2298
<211> 342
<212> DNA
<213> Homo sapiens

<400> 2298
tacgtctgct agaacacgac agaaggggaa ccggatgctg gacaggcacc ccggcttggc 60
gctgtctctc cccctcggct cggagaggcc cttcggcctg agggagcctc gccgcccgtc 120
cccggcacac gcgcagcccc ggcctctcgg cctctgccgg agaaacaggt gaaggggtg 180
cagggtgggg ccgttgggga ggcctgggga cccgggggct ccgcagcggc agggggcctc 240
tgggaccttg gggatgttgt gatggacgct gcagtggggc cgggagagat gaagagacgc 300
ggagggtcgc cctgagggaa gactcttcgg gatgacagga gc 342

<210> 2299
<211> 169
<212> DNA
<213> Homo sapiens

<400> 2299
cgatggtagt cgccgtgcct accatggtga ccacgggtga cggggaatca gggttcgatt 60

ccggagaggg agcctgagaa acggccacca catccaagga aggcagcagg cgcgcaaatt 120
acccactccc gacccgggga ggtagtgaca aaaaaaaaaa aaaaaaaaa 169

<210> 2300
<211> 141
<212> DNA
<213> Homo sapiens

<400> 2300
cacccaccag tgggaccacc agagatgtgg atgggatggt ttctgtgatg accagcaaaa 60
acacagtcag agaaagcagg actgaaatac aaagcgtcac tttttcacca cagtccgaag 120
gaaggtaaaa gaccaacacg g 141

<210> 2301
<211> 318
<212> DNA
<213> Homo sapiens

<400> 2301
gaagggcgct ccgcgagccc gtctctcctc gaatgaaagg aaacaacctc cggcgacaga 60
gccccgctct caggcactgc tggagaaccg agaccgactt ctttctcttt accctcattg 120
gcgcttctct cctgcagtcc gcctctgggc cctgccgcat ttcttgagac ttaaagtggc 180
attctaaagg caatttaaaa aatcaatggt cagctcagtt gaacagaaaa aagggcctac 240
aagacagcgc aaatggggct tttggtagtc aaatagagac aaagaatgtg gacagttact 300
aatatctgaa aaccagaa 318

<210> 2302
<211> 151
<212> DNA
<213> Homo sapiens

<400> 2302
cgttgctgtc gcttaaagcg ggccttcgtg aggatgagta caagccctga ggctttcctg 60
gcgctccgct cccacttcgc cagctctcac gctctgatat gcatcagcca ctggatcctc 120
gggattggag acagacatct gaacaacttt a 151

<210> 2303
<211> 298
<212> DNA
<213> Homo sapiens

<400> 2303
cctcctctct gccttccaac ctccagagca cgagacctaa agggtgcctg attggctgcg 60
gagggcgggg ctaagacaag gggcggggct gccgagacct tgggcccgcg tgagggaaaa 120
tttgggttcg attaagccgc agaggaaaag accaggggag tctgggccca tttgggcgtc 180
ggggcccgct aggtcagccg tcatcgaata cagaatatgt tttcgaggac gctaatatgt 240
agtcatgacc aatttcagtt cttctacttt ctgcgggcct tcgcaaaaaa aaaaaaaa 298

<210> 2304
<211> 390
<212> DNA
<213> Homo sapiens

<400> 2304
cgttgctgtc gcaggcactg tcctccctgg agctgctcaa cgttctcttc aggacctgca 60
aacatgagaa gctgaccttg gacctgacgg tgctcctggg tgtgctgcag gggcaacagc 120
agagcctaca gcaggggcca cactccaccg gctccagccg cctgcacgac ctctactggc 180

aggccatgaa aaccctggga gtccagcgcc ccaagttgga gaagaaggat gccaaggaga 240
tccccagtgc cacccagagc cccatcagta agaagcggaa gaaaaaggga ttcttgccag 300
agacgaagaa gcgcaagaaa cgcaagtcag aggatggcac gccagcggag gatggcacac 360
ctgcagccac cggcgggagc cagccccctn a 390

<210> 2305
<211> 391
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(391)
<223> n = A,T,C or G

<400> 2305
cgttgctgtc gcgcacacca aggcgcagca tcagcaggca ctgtcctccc tggagctgct 60
caacgttctc ttcaggacct gcaaacatga gaagctgacc ttggacctga cggtgctcct 120
gggtgtgctg caggggcaac agcagagcct acagcagggg gcacactcca ccggctccag 180
ccgcctgcac gacctctact ggcaggccat gaaaaccctg ggagtccagc gccccaagtt 240
ggagaagaag gatgccaagg agatccccag tgccacccag agccccatca gtaagaagcg 300
gaagaaaaag ggattcttgc cagagacgaa gaatcgcaag aaacgcangt cataggatgg 360
cacgccaacg taggaatgca cacctgcaac c 391

<210> 2306
<211> 389
<212> DNA
<213> Homo sapiens

<400> 2306
cgttgctgtc ggtggatgtc ttgcagtgat gattctgcaa aacctctttt ctaaccctga 60
gaaattcttc agtattcgta cgaggtggct cgactgctca acctcaccga gaggcaggtc 120
aagatctggt tccagaaccg caggatgaaa atgaagaaaa tcaacaaaga ccgagcaaaa 180
gacgagtgat gccatttggg cttatttaga aaaaagggta agctagagag aaaaagaaag 240
aactgtccgt ccccttccg ccttctccct tttctcaccc ccaccctagc ctccaccatc 300
cccgcacaaa gcggctctaa acctcaggcc acatcttttc caaggcaaac cctgttcagg 360
ctggctcgta ggcctgccgc tttgatggg 389

<210> 2307
<211> 159
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(159)
<223> n = A,T,C or G

<400> 2307
gagtcggact gcgacacagc ccatcccctc gaccgctcgc gtcgcatttg gcctcctccc 60
taccgctcca agcccagccc tcatccatgg catgccccct ggatcangcc attgggctcc 120
ttgtggccat ctttcacaag tactccggca gggagggtg 159

<210> 2308
<211> 147
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(147)
<223> n = A,T,C or G

<400> 2308
ggtttttcag ctcacttcaa gggtacctga agcgaattgg caccaaagca gcagctgtat 60
tgccgcagtt ctagcttcac cttcacgatg tttcccttgg tcaaaagcgc actaaatcgt 120
ctccaagttc gaagcattca gcaaacn 147

<210> 2309
<211> 148
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(148)
<223> n = A,T,C or G

<400> 2309
tgattatcta ccgggacctc atcagccacg atgagatgtt ctccgacatc tacaagatcc 60
gggagatcgc ggacgggttg tgcctggagg tgtaggggaa gatggtcagt aggacagaag 120
gtaacattga tgactcgctc attggtgn 148

<210> 2310
<211> 391
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(391)
<223> n = A,T,C or G

<400> 2310
cacgccattc tcctgtctca gcctcctgag tagctgggac tacaggcgcc cgccaccatg 60
cccagctaat ttttttgtat ttttagtaga gacgggtttt caccgtgtta gccaggatgg 120
tctcgatctc ctgacctcgt gatctgcccg ccttggcctc ccaaagtgct gggattacag 180
gcatgagcca ccgcgcctgg cccatttttct tcctcttttg aggtaatgga tttgtttgga 240
gatggcatgt tagtagacga ctgaatatgg aaaggatatc gagttatcta ttttggtaat 300
tntatttttg gtttttatca tctagatttt tatcatggat tagtctgaaa tttaaagttc 360
tggccagtcg gttttctttt atcttggaag g 391

<210> 2311
<211> 166
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(166)
<223> n = A,T,C or G

<400> 2311
aaaaggtctn natnaattgc aaagatgtct gacacagtct ggcattgctg gaggatacaa 60

accttttaac ctggagactt gccggcttat ggtttcaatg ctggatagag atatgtctgg 120
cacaagggtt tcaatgaatt taaagaactc tgggctgtac tgaatg 166

<210> 2312
<211> 149
<212> DNA
<213> Homo sapiens

<400> 2312
atgacccacc aatcacatgc ctatcatata gtaaaaccca gcccatgacc cctaacaggg 60
gccctctcag ccctcctaat gacctccggc ctagccatgt gatttcactt ccactccata 120
acgctcctca tactatgcct actaaccaa 149

<210> 2313
<211> 296
<212> DNA
<213> Homo sapiens

<400> 2313
gcttcggctg caagaagacg acggaagggg ggtgttttgc gggtagcgcg gcgtgataag 60
ccatgagcac caaaggctct ggcgacaccc tgtacgaggc ggtgcgggaa gtgctgcacg 120
ggaaccaacg caagcgccgc aagatcctgg agacggtgta gttgctgagc agcttgaata 180
actatgatcc cctgaaggac aagggctttt gggacacgcg gaggcttaag tccactcggc 240
gccgtaggtt ctttgagttt gggctggggg accagcagct ctgggtggag gctaag 296

<210> 2314
<211> 166
<212> DNA
<213> Homo sapiens

<400> 2314
ggccgacgtg ttcttgcggt ggcggagcgg cggattatcc ttcgcggggc aaaatggagc 60
tcgaggccat gagcagatat accagcccag tgaacccagc tgtcttcccc catctgaccg 120
tggtgctttt ggccattggc atgttcttca ccgactggtt cttcgg 166

<210> 2315
<211> 178
<212> DNA
<213> Homo sapiens

<400> 2315
ctacgcttgc tgtttgcgct ctctgaaagg gacaccaagg ctgtgattta caccaactgt 60
cgagcactgc ttctccatgg agaaactaga aaaactgctt ttggaattat ctctacagtg 120
aagaaacctc ggccatcaca aggagatgaa cattgtcttc cagcttccat gaaagact 178

<210> 2316
<211> 151
<212> DNA
<213> Homo sapiens

<400> 2316
gacttgggct gaggagccgc cgcgtccgct cgccgagtcc cctcgccaga ttcgctccgt 60
cgccgccaag atgatgtgcg gggcgccctc cgccacgcag ccggccaccg ccgagaccca 120
gcacatcgtc gaccaggtga ggtcccagct t 151

<210> 2317
<211> 402

<212> DNA
<213> Homo sapiens

<400> 2317
ggcacgaggc gggttccttt tttagaagct ttgtgggttg attttttttt cttttctttt 60
ttggacattt ttaattgcag tttaaaagtg aatcgtaaga gaacctcagc attgtgcacg 120
ataagagaat gtgtcagtat ttcagggttc tacattttat ctgtaaaatg tgacttttt 180
ttttttttat cacaccaaaa gaaaaaggtg gtttggcccc gggggttttt tataaaaaat 240
taacccccc ctttttcac aaaaaaaaac agcggggagt tttggcccca ttataaaaaa 300
agggttccca cccaaatttt tgtggggcct agggggccct cagaaatggc ataaaaactt 360
ggaccggcta aaataacccc ccacccttt tgaagtgggg gg 402

<210> 2318
<211> 187
<212> DNA
<213> Homo sapiens

<400> 2318
gaccacgctt ttcatctgtc ccgctgcgtg ttttcctctt gatcgggaac tcctgcttct 60
ccttgcctcg aaatggaccc caactgctcc tgctcgcctg ttggctactg tgcctgtggc 120
ggctcctgcc catgctaaga gtgcaaatgc tcctcctgca agaagaactg ccgctcctgc 180
tggcctg 187

<210> 2319
<211> 155
<212> DNA
<213> Homo sapiens

<400> 2319
gaaagcagca gctgtattgc cgcagttcta gcttcacctt cacgatgttt cccttggtca 60
aaagcgcact aaatcgtctc caagttcgaa gcattcagca aacaatggca aggcagagcc 120
accagaaacg tacacctgat ttttatgaca aataa 155

<210> 2320
<211> 314
<212> DNA
<213> Homo sapiens

<400> 2320
cattggtatt tcattgtatg acaatgatgt tcacttttac cactttcatt taacacagta 60
ctggaagttc tagccagagc aataagaaaa gagatagaaa taaagtccat ccaaattgga 120
aatgcagagg tcaaattgtc cttgtcatag acaattgatc ttatattatg aaaaacctaa 180
ataattcatc aaaaaactgt tagaattgat aaacaaattc agtaagttta caggctataa 240
aatcaatatg gaaaaatttg aagcatttct acatgccaac agtggacaat gtgaaaaaga 300
aatcaagaaa gcaa 314

<210> 2321
<211> 352
<212> DNA
<213> Homo sapiens

<400> 2321
ggtggaaaaa ggaatcattg acccaacaaa ggctgtgaga actgctttat tggatgctgc 60
tggtgtggcc tctctgttaa ctacagcaca agttgtagtt acagaaattc ctaaagaaga 120
aaaagaccct ggaatgggtg caatgggtgg aatgggaggc gttcttttac tttctgtacg 180
aagctatttc tattaaaaaa ccaaaaatct aatctcttac attatttttt gcctttatac 240
aaatatattt cctacttcta tctcacagtc attctatata gcgtctcata ctcctaattt 300

tactatatcc actttatcaa ctttatcctc tatacgacct tgtataaata tc 352

<210> 2322
<211> 289
<212> DNA
<213> Homo sapiens

<400> 2322
gcagagctaa ggaagaagag cgcctaaaca aactccgact ggaaagcgaa ggctctcctg 60
aaactcttac aaacttaagg aaaggatacc tgtttatgta taatcttgtg caattcttgg 120
gattctcctg gatctttgtc aacctgactg tgcgattctg tatcttggga aaagagtcct 180
tttatgacac attccatact gtggctgaca tgatgtattt ctgccagatg ctggcagttg 240
tggaaactat caatgcagca attggagtca ctacgtcacc ggtgctgcc 289

<210> 2323
<211> 171
<212> DNA
<213> Homo sapiens

<400> 2323
gcaagcgcca ccctagcaat atcaaccatt aacctttcct ctacacttat catcttcaca 60
attctaattc tactgactat cctagaaacc gctgtcgcct taatccaagc ctacgttttc 120
acacttctag taagcctcta cctgcacgac aacacataaa aaaaaaaatt c 171

<210> 2324
<211> 405
<212> DNA
<213> Homo sapiens

<400> 2324
cgttgctgtc ggacctgccc cggggccagg tggagaaagt gagggccgta caaggaagtg 60
aaattctgag ttgttggggc taagcctgac ccctctccca tgctccccgc cccaacccac 120
tctggcctca gtagattttt ttttcagttg tggttgttgc ccaggctgga gtgcagtggc 180
gccatcttgg ctcactgcac ctccacctte cgggctcaag cgattctcca gcctcagcct 240
cctgagtagc taggactgca ggtgctccac cacgcccggc taatttttgt atttttagta 300
gagatggggt ttccccatgt tggccaggct ggtctcgaac tcctggcctc aggtgtgatc 360
cggccgcctc cgcctcccca gcgctgagat acaggggggg gccac 405

<210> 2325
<211> 158
<212> DNA
<213> Homo sapiens

<400> 2325
gacttcaagg gtacctgaag cgaattggca ccaaagcagc agctgtattg ccgcagttct 60
agcttcacct tcacgatgtt tcccttggtc aaaagcgcac taaatcgtct ccaagttcga 120
agcattcagc aaacagtggc taggcagagc caccagaa 158

<210> 2326
<211> 375
<212> DNA
<213> Homo sapiens

<400> 2326
cgttgctgtc tttctatgag agaccgggct ttaccatatt acccacgagg ctgttgaggt 60
cctgagcttg agatacaccc gcctcccctct tccaaagctc tgagattaca gacttgagcc 120
accttgtctg gacggaaatc tcagaattct ttaagactga cctaattgct gcatcccaag 180

tttacatgca ctttcctttt tattgtggtc gccacttgcc ctttgtgtcc cacttcatgc 240
ctgtcatgtt ctacctgact tgcgacatgg actgacggat tatactgccc ccagagaagg 300
agcttgccat gcccggggag gacctgaaaa tcaaactaat cttgcggcag acaatgatct 360
tagagaaagg ccagc 375

<210> 2327
<211> 427
<212> DNA
<213> Homo sapiens

<400> 2327
cctcgaatcg ccctttgca tgatcccatc gatcccaact ccgcagatgt cgggggtgaa 60
gggagaagct gccggtcgca ctcacaatga cgacgctcct gctattgctg ctggagctcc 120
gggagctggg agaggcccaa ggatcccttc acagatggaa tacttcggca ctatctccat 180
tggctgccca ccacagaact tcactggcat cttcgacact ggctcctcca acctctgggt 240
cccctctgtg tactgcacta gcccagcctg cagtggaagg actaaccgtg gttggccagc 300
agtttggaga aagtgtcaca gagccaggcc agacctttgt ggatgcagag tttgatggaa 360
ttctgggcct gggataccc tccttggctg tgggaggagt gactccagca tttgacaaca 420
tgatggc 427

<210> 2328
<211> 314
<212> DNA
<213> Homo sapiens

<400> 2328
gggcgttggt ggcagagatc atcctgacga cgctgctggc cctggctgta tgcatgggtg 60
ccatcaatga gaagacaaag ggccctctgg ccccgttctc catcggcttt gccgtcaccg 120
tggatatcct ggctgggggc cctgtgtctg gaggctgcat gaattccgcc cgtgcttttg 180
gacctgcggt ggtggccaac cactggaact tccactggat ctactggctg ggcccactcc 240
tgactggcct gcttgttgca ctgctcatta tgtgcttcaa tgcacaccgg aagattcggc 300
ctcatccctg aagg 314

<210> 2329
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2329
agacaaaggg ccctctggcc ccgttctcca tcggctttgc cgtcaccgtg gatatcctgg 60
ctgggggccc tgtgtctgga ggctgcatga atcccgcccg tgcttttgga cctgcggtgg 120
tggccaacca ctggaacttc cactggatct actggctggg cccactcctg gctggcctgc 180
ttgttggact gctcattagg tgcttcattg gagatgggaa gacccgcctc atcctgaagc 240
ctcggtgaag cagagctcgt gggattcctg ctgctccagg tgtcctcagc tcacctgtcc 300
cagactcaag acaggggagt g 321

<210> 2330
<211> 270
<212> DNA
<213> Homo sapiens

<400> 2330
gacacgttgg ctgcgttttc ggcgggcttc ccgggtacaa aaatggctgt ggctagcgat 60
ttctacctgc gctactacgt agggcacaag ggcaagtttg ggcacgagtt tctggagttc 120
gaatttcggc cggacggaaa gcttagatat gccaacaaca gcaattacaa aaatgatgtg 180
atgatcagaa aagaggctta tgtgcacaag agtgtaatgg aagaactgaa gagaattatt 240
gatgacagtg aaattacaaa agaagatgat 270

<210> 2331
<211> 331
<212> DNA
<213> Homo sapiens

<400> 2331
tgggggcgac taacctaccg agcctggtga tagctgcttg gacgagatag aatcttaggt 60
caactttata ttcggccaca gaacccttta catccccttg tgaatttatc tgttagtcca 120
aagaggaaca gctgtttgga cactatgaaa aaaccttgcg gagagagtaa aaaatttaac 180
acccatagtt aacctaccga gcctggtgat agctggctgg ccaagataga atcttagttc 240
aactttaaat ttgcccacag aaccctctaa atccccttgt aaattgaact gttagtccaa 300
agaggaacag ctctttggac actaagaaaa g 331

<210> 2332
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2332
aattaggaga tgctgatctc tcacattatg aatttctaaa tcctagaaag aaaggcttgg 60
agagcttctg aatatagaga agtttcattt aaggactagg tccccccttgt tgatgtatca 120
aaatattaca gactctaaac tgagacttaa ttctcaaatg tgttttactt gatctaaaat 180
aatctgtcca caaaaataaa attctaagta ataaattgtt attttcccac cgggggaatc 240
actaacccat ttatgcctga gggtgcaatt ttttgaactt gaaaatcaga ccttggcgat 300
gactttgaac aaaatattaa t 321

<210> 2333
<211> 167
<212> DNA
<213> Homo sapiens

<400> 2333
taaaacactg aactgaccat taacagccca atatctacaa tcaaccgaca agtcattatt 60
accctcactg tctacccaac acaggcatgc tcataaggaa aggtttgaaa aagtacaagg 120
aactcggcaa atcttacccc gcctgtttac caaaaacatc acctctt 167

<210> 2334
<211> 402
<212> DNA
<213> Homo sapiens

<400> 2334
agatgcctgc tatcctgact aatttaagtc attagctgac tgcatagctc tttttcttga 60
gaggctctcc attttgattc agaaagttag catatttatt accaatgaat ttgaaaccag 120
ggctttttttt tttttggggg aaggaaaacc cacctccttc cccccaaaaa attaaaaaag 180
gccccttggt ttctttatta aggaaccccc ttctaattaa tgggccaaac cccaaggaac 240
aaaaatttcc caatattctg cgcccccgaa aaagaggtgc ctttttaaga aaacacgttt 300
tttaccttta accaaaaacc caggggggaaa aataaaacct tcgggggggga aatccggggg 360
gtgaaaaaaa ggggccttcc attccccccc cgttttttttt tt 402

<210> 2335
<211> 367
<212> DNA
<213> Homo sapiens

<400> 2335

agttgtgata cgaatagaac aaaaaaaaaa aaacccttaa acttttgtgg ggaccccaag 60
gagttgggaa cttggggaaa aataacccgg gccccagcgg ttcccaccca cattccattt 120
ttttctttgg aacggattta gtaaggccca aaggggggaac cccttctttg gaaaaaagtc 180
ccaattgggg tctaaaacgg gggaaaaaaa acaaccccggc cgccacttgg ttaaacctaa 240
aagcttttaa aaacccaata tattcggcca aaaatatccc tggatggtaa cccctcaccc 300
cataggggtt tttggttttt aaacaaaaca atatttgtcg gggggggaaa aacccttggc 360
tttcaaa 367

<210> 2336
<211> 188
<212> DNA
<213> Homo sapiens

<400> 2336
ggctgcctct aggttctggg aagatggcga aggtctcaga gctttacgat gtcacttggg 60
aagaaatgag ggataaaatg agaaaatgga gagaagaaaa ctcaagaaat agtgagcaaa 120
ttgtggaagt tggagaagaa ttaattaatg aatatgcttt taagctgggg agatgatatt 180
tggtatat 188

<210> 2337
<211> 393
<212> DNA
<213> Homo sapiens

<400> 2337
cgttgctgtc ggaaaaggcc aagatagcat agaacctgtt cccggtcaaa aggggaaaaa 60
aaaagcagtg gagcagcgtg acttcattgg agtggacagc acaggaaaga ggctgctctt 120
catggctaat gaagcagact tggatgaaga gctggtcatt aagggatcca tcctacagaa 180
gtcaataact tctatccgga gtgaactgat tccatattta gtgagaaaac agttttcctc 240
agcttcctca caacagggac aagaagaaaa agaggaggat ctaaagaaaa aggagctgaa 300
gtccttagat atctacagtt ttataaaaga agccaataca ctgaacctgg ctccctatga 360
tgcctgctgg aatgcctgtc gaggagacag gtg 393

<210> 2338
<211> 172
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(172)
<223> n = A,T,C or G

<400> 2338
atnaacaaac ttaagtatgc cctgacagga gatgaaacta agaagatttg cgtgcagcgg 60
ttcattaaaa tcgatggcaa ggtacgaact gatataacct accctgctgg attcatggat 120
gtcatcagca ttgacaagac gagagagaat ttccgtctga tctatgacac cg 172

<210> 2339
<211> 396
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(396)
<223> n = A,T,C or G

<400> 2339
cgttgctgtc ggtgacctgc agagcctgtt ggggtacacc cctgaggagc tgcacgccat 60
gctggacgtc aagccagatg ccgacgagtg atggcactga aggggctggg gaaaccctgc 120
tgagaccttc caaggacagc cgtgttggtt ggactctgaa ttttgaattg ttattctatt 180
ttttatttte cagaactcat tttttacctt caggggtggg agctaagtca gttgcagctg 240
taatcaattg tgcgcagttg ggaaaggaaa gccaggactt gtggggtggg tgggaccaga 300
aattcttgag caaattttca ggagagggag aagggccttc tcagaagctt gaaggctctg 360
gcttaacaga gaaagagact aatgtgtcca atcatn 396

<210> 2340
<211> 385
<212> DNA
<213> Homo sapiens

<400> 2340
cgttgctgtc gccaaaatcg caccactgta ctccagcctg ggtggcagag tgagactccg 60
tctcaaaaaa aaaaaagggc cttaacctat cccttaggac aaagggactt aaaaaatttt 120
tacaaaactt tttatccggg gagggcaaaa tatacttttt attcttcacc ccagggaaca 180
ttctccaaaa taaaccatat gatgggccgc aaaacaagtc tcaataattt taaaaaaatg 240
gaaattatat caggtcctct tttaaaccac aggggaataa aatgggaaat cacctccaaa 300
gggacccctc aaagccttgc aaagacatgg aaattaaata ccctgctccg ggattatggt 360
ggggtcaata acaaaatcga gaggg 385

<210> 2341
<211> 352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(352)
<223> n = A,T,C or G

<400> 2341
acataagttg caatactgac ataccctgag aatttgatca ccttcctcta agccttcctt 60
ggctgcaggg ctatcttcta gaacgccagc tacaaatatt ccaacatcat ttccaccagc 120
cagccgcaaa cccacactat ctccttttct gaattttacc aatttcatgc tgggcctgtt 180
aaaacagata tttcatttga aacagttaag aagagcttaa aacgttgtag caatcactac 240
agtgaaaact atattcagaa ttaaataaag aaccatcatt tctaaaactt ctctcatacc 300
actattttac taaataaaat ttagtgttag aattcaaatc agacttaata an 352

<210> 2342
<211> 388
<212> DNA
<213> Homo sapiens

<400> 2342
aattaggaga tgctgatctc tcacattatg aatttctaaa tcctagaaag aaaggcttgg 60
agagcttctg aatatagaga agtttcattt aaggactagg tccccccttgt tgatgtatca 120
aaatattaca gactctaaac tgagacttaa ttctcaaatg tgttttactt gatctaaaat 180
aatctgtcca caaaaataaa attctaagta ataaattgtt attttcccac cgtgggaatc 240
actaacccat ttatgcctga ggttgcaatt ttttgaactg caaaatcaga ccttggcgat 300
gactttgaac aagatataaa taacttccac atgcttagcg ttccaataat ggaacactgg 360
gcatataatg tgaaatgtat tctatgaa 388

<210> 2343

<211> 183
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(183)
<223> n = A,T,C or G

<400> 2343
acgttccncc gctatatgcg gcggtctggc aggaatggga ggcatccata acgagaagga 60
gaccatgcaa agcctgaacg accgcctggc ctcttacctg gacagagtga ggagcctgga 120
atacgaaaac cggaggctgg agagcaaaat ccgggagcac ttggagaata agggacccca 180
ggt 183

<210> 2344
<211> 405
<212> DNA
<213> Homo sapiens

<400> 2344
cgttgctgtc gggcatgtgc ctgtggtcct agctactcat gaggctgagg taggaggatc 60
acttgagcct gggaggtcga ggctgcagtg agccatgaac atgctactgc attccagcct 120
gggcaacaga gtgagaccct ggctcaaaaa acaaaaacaa aaactagttt gttttagtat 180
tcattaatta cgtatatgag cactggtact ctagtgtttg ttcttgtata cagagttttc 240
ttaaatgaga tgatgctatt taattctgtt acttgttttt tcaactaatg gatcttttaa 300
agttttttat ttaaattttt tgtgggtaca tattaggtac atatacttat ggggtacatg 360
agatgttttt ataaaggctc agctaatgta tcttgaatat catgt 405

<210> 2345
<211> 329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(329)
<223> n = A,T,C or G

<400> 2345
ggagctcaga gctaaggaag aagagcgcct aaataaactc cgactggaaa gcgaaggctc 60
tcctgaaact cttacaaact taaggaaagg atacctgttt atgtataatc ttgtgcaatt 120
cttgggattc tcctggatct ttgtcaacct gactgtgcga ttctgtatct tgggaaaaga 180
gtcctttttat gacacattcc atactgtggc tgacatgatg tatttctgcc agatgctggc 240
agttgtggaa actatcaatg cagcaattgg agtcactacg tcaccggtgc tgccttctct 300
gatccagctt cttggaagaa attntattt 329

<210> 2346
<211> 394
<212> DNA
<213> Homo sapiens

<400> 2346
ggcacgaggc cggccaatgc cggaccgctt tggcaccgtc cgcccgatct ctccacccgt 60
gggccggcaa tggcgggcgc agtttcgctc ttgggtgtgg tggggctgct gcttgtgtct 120
gcgctgtccg gggtcctagg agaccgagcc tatcccgacc tccggacaca cccagggaac 180
gcagcccacc ccggctctgg agccacggaa ccccggcggc gaccaccgct caaggatcaa 240

cgcgagcgga cccgggccgg gtcgctgcct ctgggggcgc tgtacaccgc ggccgtcgcg 300
gcttttgtgc tgtacaagtg tttgcagggg aaagatgaaa ctgcggttct ccacgaggag 360
gcaagcaagc agcagccact gcagtcagag caac 394

<210> 2347
<211> 162
<212> DNA
<213> Homo sapiens

<400> 2347
attatgacag aggttactct agcctgctta aaagagattt tggggcaaaa actcagaatg 60
gtgtttacag tgctgcgaat tacaccaatg ggagctttgg aagtaatttt gtgtctgctg 120
gtatacagac cagttttaag actggtaatt caacagggac tt 162

<210> 2348
<211> 358
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(358)
<223> n = A,T,C or G

<400> 2348
cgttgctgtc gattcanaat tgggatgggg gttggggtga agcacactta ttatcttcag 60
ttgcagtgat ttcaaattta agatttttg ttgttggttt gaactgtccc cttagtttct 120
tgttatttcc aatttgttct gcttagtcat tacttttaat tcttttctta ctaaaatttt 180
atggaggttg ggggaaggga gttagcatca ctaacctgac agttgttgcc aggaatttgc 240
tctgtttact gctagtatat tagaaatcct agatctcaga atcacaatag taataaacaa 300
caggggtcat tttttcctaa cttactctgt gttcaagtgt ggaatttctg tctcccan 358

<210> 2349
<211> 420
<212> DNA
<213> Homo sapiens

<400> 2349
tctactgtgg cactatttaa gcaagttaaa atttagttaa accctctcat tattaaagag 60
gaaaggcgat ggtgatgtct gtagtacaat ataaaccata attgtgattt accttaagta 120
ggtataactc ttatgggata tacagtatag tttttgtgaa tctttacatg acagcattat 180
ctttttataa tttttttttcc taagataaac aaatgcatag ttttcttcta tgggtgatag 240
aaacagcttt ttgaagtaat gaaaacctca aaagatcatg ttgattctta atttttgcct 300
tttgcataag cctctttata acatgtatct ttaaaaccaa ttaagtcttt aggaatgtgt 360
aaccagaact atgttagtat tgcttataaa actttaggta gggtcaatat atacctatag 420

<210> 2350
<211> 373
<212> DNA
<213> Homo sapiens

<400> 2350
cgttgctgtc gaataagatg tattctttat aattgaattg gtttttccca cgtctaactg 60
gaaacaaaac agaaggggcg tcataaattt gaataagcag aacatactgt tctcaacata 120
ctgtaatcaa aaggaggaat ttcagtgggt ctctgtgtgt atgagagaga gagtgtgtgt 180
ttgtgtgttt caaggtcaca acaggctttt ttgtttttgt tttttgctct ttgctccttt 240
tcgagaagga ggcctgctct tgccgcccag gctggattcc acacgcgccc tctccatcca 300

ctgtatcctc tgccctccag ggtcagccag gactactgcc tcctcctccg gacgaactgg 360
gacccccca ccc 373

<210> 2351
<211> 294
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(294)
<223> n = A,T,C or G

<400> 2351
ggcggctggc ctgcatcggg gacgagatgg acgtgagcct cagggccccg cgcctggccc 60
agctctccga ggtggccatg cacagcctgg gtctggcttt catctacgac cagactgaag 120
acatcaggga tgttcttana agtttcttgg tcgggttgac caccttaag gataacattt 180
ttatttttg gagacaccca aaccccggtt cctgtttctc cttctcacac gatctttctt 240
ctctttggtt gttgccgttt gcgttgtttt cctcacgtct tcccccttgcc tgtc 294

<210> 2352
<211> 322
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(322)
<223> n = A,T,C or G

<400> 2352
aaatatagaa acaaaagatt attgccagcc accacaaata cacacttaac tatgtagacc 60
attgaaacta taaagcaact acacaatcaa gtctacatga caaccgctta acaacacaat 120
gacacgatca atttttcaca tatctacatt aaccttggac acaaaagggc taaacagctc 180
acttaaaagg tacagagtgg caagttagat acagaagcaa gacctgactg catgctgtct 240
tcaagagatc catctcacat gcagtaacat ctatgggctc aaagtaaagg gattgagaaa 300
catgtttgaa gtaaatggaa an 322

<210> 2353
<211> 164
<212> DNA
<213> Homo sapiens

<400> 2353
aggttcccct tcggctacag gaaggcagga ggggtgagtc ccctactccc tcttcactgt 60
ggccacagcc ccottgccct ccgcctggga tctgagtaca tattgcggtg atggagatgc 120
agtcacttat tgtccaggtg aggcccaaga gccctgtggc cgcc 164

<210> 2354
<211> 284
<212> DNA
<213> Homo sapiens

<400> 2354
gacgttggct gcgttttcgg cgggcttccc gggtacaaaa atggctgtgg ctagcgattt 60
ctacctgcgc tactacgtag ggcacaaggg caagtttggg cacgagtttc tggagttcga 120
atttcggccg gacggaaagc ttagatatgc caacaacagc aattacaaaa atgatgtgat 180

gatcagaaaa gaggcttatg tgcacaagag tgtaatggaa gaactgaaga gaattattga 240
tgacagtgaa attacaaaag aagatgatgc tttgtggcct cccc 284

<210> 2355
<211> 388
<212> DNA
<213> Homo sapiens

<400> 2355
ggcacgagat gagcccagcc ttcagggtct ttgatgtgga gccccgcgcc aaaggcgtcc 60
ttctggagcc ctttgtccac caggtcgggg ggcactcatg cgtgctccgc ttcaatgaga 120
caaccctgtg caagcccctg gtcccaaggg aacatcagtt ctacgagacc ctccctgctg 180
agatgcgcaa attcactccc cagtacaaag gacaaagcca aaggcccctt gttagctggc 240
catccctgcc ccatttttte ccctggtcct ttcccctgtg gccacaggga agtgtggcct 300
gaatacccca ccccggctcc tctgcaccca aagctggggg ccacctcaga agtgtcatct 360
ctctttgagc acgcattccc ctggagag 388

<210> 2356
<211> 336
<212> DNA
<213> Homo sapiens

<400> 2356
ggaaaaccag ctctgaggtt gagccattga taaatgctta taaacatctt ggccaagagg 60
acacatcagc ccaaggagga ctagaggcac aaatatgcca gctacctttg gacatttggc 120
agggggatac aatggccact attatggata tctttggagt gaagtatttt ccatggatat 180
gttttacagc tgttttataa cagaagggat catgaacacg gaggttggaa cgaatttccg 240
aaggctcacc ctgatacctg cgggatctct ggacggggtg gacatgctac acaatttctt 300
ggacgtgagt gaagcctcag agcgtttcta cagact 336

<210> 2357
<211> 325
<212> DNA
<213> Homo sapiens

<400> 2357
ggatgacgtc actgcaaggc gccgggggac acgttggctg cgttttcggc gggcttcccg 60
ggtacaaaaa tggctgtggc tagcgattcc tacctgcgct actacgtagg gcacaagggc 120
aagtttgggc acgagtttct ggagttcgaa tttcggccgg acggaaagct tagatatgcc 180
aacaacagca attacaaaaa tgatgtgatg atcagaaaag aggcttatgt gcacaagagt 240
gtaatggaag aactgaagag aattattgat gaccgtgaaa ttaccaaaga agatgatgct 300
ttgtggcctt ccctgataa gggtg 325

<210> 2358
<211> 405
<212> DNA
<213> Homo sapiens

<400> 2358
tgagcccagc cttcagggcc atggatgtgg agccccgcgc caaaggcgtc cttctggagc 60
cctttgtcca ccaggtcggg gggcactcat gcgtgctccg cttcaatgag acaaccctgt 120
gcaagccccc ggtcccaagg gaacatcagt tctacgagac cctccctgct gagatgcgca 180
aattcactcc ccagtacaaa ggacaaagcc aaaggccccc tgttagctgg ccatccctgc 240
cccatttttt ccctggtcc tttcccctgt ggccacaggg aagtgtggcc tgaataccc 300
accccggctc ctctgcaccc agagctgggg gccacctcag aagtgtcatc tctctctgag 360
cacgcattcc cctgcagcag tcgaggactg agcagattga gtgat 405

<210> 2359
<211> 387
<212> DNA
<213> Homo sapiens

<400> 2359
ggcacgaggg cgagtgtagt gcttccgagc ggatcccagt gtgcggcggc agcggcggcg 60
gcggcgcctc ccgggctccg gctccggctt ctgctgttgc tcttctccgc cgcggcactg 120
atccccacag gtgatgggca gaatctgttt acgaaagacg tgacagtgat cgagggagag 180
gttgcgacca tcagttgcca agtcaataag agtgacgact ctgtgattca gctactgaat 240
cccaacaggc agaccattta tttcagggac ttcaggcctt tgaaggacag caggtttcag 300
ttgctgaatt tttctagcag tgaactcaaa gtatcattga caaacgtctc aatttctgat 360
gaaggaagat acttttgcca gctctat 387

<210> 2360
<211> 413
<212> DNA
<213> Homo sapiens

<400> 2360
gactgctgca gccggcgctg ggcccaggca ccaccgcggt gctgctgctg cagatctcca 60
cgcggccgga ggatctcggg gagacagtct gctccctcaa gttcgccgac cgagtgggtc 120
aagtggagct ggggccagcc cggcgccgca gggtcccgcg ctcctccggg acgccttctt 180
ccctcagcac cgacactccg ctcaccggga ccccctgcac ccctacgccg tcccctggca 240
gtcctccatg ccccagtccc gacaacggct cgggctcggc tctcgcgccc gcagagggcc 300
tgcccctcta gtcctgggtc gcggccctgc ccatggggtc tcaggccagg tctctgctgg 360
cagaggcggt agtaaagtcc ctgtaccccg tctcccaggg cacaagctcc cta 413

<210> 2361
<211> 318
<212> DNA
<213> Homo sapiens

<400> 2361
gatgctcggg gctgccttgg ccaaggcggt gagtcctgag gagaggttct ggaatgcatc 60
tggggcggcc tttgtgacag tccaggagca ggggcaggtg gcaggggcgt tggtggcaga 120
gatcatcctg acgacactgc tggccctggc tgtatgcatg ggtgccatca atgagaagac 180
aaagggccct ctggccccgt tctccatcgg ctttgccgtc accgcggata tcctggctgg 240
gggccctgtg tctggaggct gcatgaatcc cgcccgtgct tttggacctg cgggggtggc 300
caaccactgg aactttcg 318

<210> 2362
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2362
cagccatgtc tggtcgaact gctgggctct gctctcttca tcttcatcgg gtgcctgtcg 60
gtcatcagaa tgggacggac actgggctgc tgcagacggc cctggcccac gggctggctt 120
tggggctcgt gattgccacg ctggggaata tcagtggtgg acacttcaac cctgcggtgt 180
ccctggcagc catgctgatc ggaggcctca acctggtgat gctcctcccg tactgggtct 240
cacagctgct cgggggggatg ctcggggctg ccttggccaa ggcggtgagt cctgaggaga 300
ggctctggaa tgcatctggg g 321

<210> 2363
<211> 386
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(386)
<223> n = A,T,C or G

<400> 2363
cgttgctgtc ggctgcgcgt cgcangagta acctacttgg tctcctgctt tcgcgacatg 60
gccttcaatt ttggggctcc ctcgggcacc tccggtaccg ctgcagccac cgcggccccc 120
gcggatcata tctgaagata ttagtgagct acaaaagaat caaactacat ctgtagccaa 180
aattgcacaa tacaagagga aactcatgga tctttcccat agaactttac aggtcctaat 240
caaacaggaa attcaaagga agagtgggta tgccattcag gctgatgaag agcagttgcg 300
agttcagctg gatacgattc agggtgaact aaatgcacct actcagttca agggccgact 360
aaatgaattg atgtctcaaa tcaggg 386

<210> 2364
<211> 381
<212> DNA
<213> Homo sapiens

<400> 2364
ggcacgaggg taagaagagc tgtcgcatta cccaggcatc gtggatggcc ccgcagccct 60
ggatagcttc ccagagacag tgcccccagt accagggccc tatggaccgc accggccttc 120
ccagaccctg cccccaggct tggacagcca cggtctgaag agggagaagg atgagatcta 180
tggacacccg ctcttccccc tcttggccct ggtctttgag aaatgtgaac ctggctacat 240
gctctccccg tgacggggcc ggagctgggc tggggacacc ccctggagga gatgtctgct 300
cctctgatta cttcaacgag gacatcgctg cctttgccaa gcaggtccgc tctgagaggc 360
ccctcttctt cttcaaccca g 381

<210> 2365
<211> 382
<212> DNA
<213> Homo sapiens

<400> 2365
cgttgctgtc ggcagattct gcagccatca aacatccagc agcagcaaag cctgcagccg 60
ccaccaccac caccacagcc gcaccttggc gtgagctcag cagccagcgg ccacctgggc 120
cggagcttcc tgagtggaga gccgagccag gcagacgtgc agccactggg ccccagcagc 180
ctggcggtgc acactattct gccccaggag agccccgccc tgcccacgtc gctgccatcc 240
tcgctgggcc cacccgggac cgcagcccag ttcctgacgc ccccctcgca gcacagctac 300
tgctcgcctg tggacaacac ccccagccac cagctacagg tgcctgagca ccccttttct 360
accccgtccc ctgagtcccc tg 382

<210> 2366
<211> 319
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(319)
<223> n = A,T,C or G

<400> 2366
ggggtacaaa aatggctgtg gctagcgatt tctacctgcg ctactacgta gggcacaagg 60
gcaagtttgg gcacgagttt ctggagttcg aatttcggcc ggacggaaag cttagatatg 120

ccaacaacag caattacaaa aatgatgtga tgatcagaaa agaggcttat gtgcacaaga 180
gtgtaatgga agaactgaag agaattattg atgacagtga aattacaaaa gaagatgatg 240
ctttgtggcc tccccctgat agggttggcc gacaggagct tgaaattgta attggagatg 300
agcacatatc ttttaccan 319

<210> 2367
<211> 397
<212> DNA
<213> Homo sapiens

<400> 2367
ggatgacgtc actgcaaggc gccgggggac acgttggctg cgttttcggc gggcttcccg 60
ggtacaaaaa tggctgtggc tagcgatttc tacctgcgct actacgtagg gcacaagggc 120
aagtttgggc acgagtttct ggagttcgaa tttcggccgg acggaaagct tatatatgcc 180
aacaacagca attacaaaaa tgatgtgatg atcagaaaag aggcttatgt gcacaagagt 240
gtaatggaag aactgaagag aattattgat gacagtgaaa ttacaaaaga agatgatgct 300
ttgtggcctc cccctgatag ggttggccga caggagcttg aaattgtaat tggagatgag 360
cacatatctt ttaccacatc aaaaaataag ttctctt 397

<210> 2368
<211> 406
<212> DNA
<213> Homo sapiens

<400> 2368
attcgaattc cgttgctgtc ggcggcatca aactcttttt gactgctccc ctatctccac 60
cccggagctg ctcactccgt gcggctcggc ggagtacatg gccccggagg tagaggaggc 120
cttcaacgag gaggctagca tctacgacaa gcgctgcgac ctgtggagcc tgggcgtcat 180
cttgtatatc ctactcagcg gctacccgcc cttcgtgggc cgctgtggca gcgactgcgg 240
atgggaccgc ggcgaggcct gccctgcctg ccaaacatgc tgtttgagag cattcaagag 300
ggcaagtacg aagttccccg acaggactgg gcccacatct tctgcgctgc caagacctca 360
tattcaagct gttggtccgg acccccaaca gaggctgtat gccgcg 406

<210> 2369
<211> 404
<212> DNA
<213> Homo sapiens

<400> 2369
cgttgctgtc gggagacttg aggagttgct gaggtgccac gtgtacctgg gcacgaggat 60
atgatgtttc agcttctccg aggtctggac tttcttcatt cacaccgagt agtgcatcgc 120
gatctaaaac cacagaacat tctggtgacc agcagcggac aaataaaact cgctgacttc 180
ggccttgccc gcatctatag tttccagatg gctctaacct cagtggtcgt cacgctgtgg 240
tacagagcac ccgaagtctt gctccagtcc agctacgcca cccccgtgga tctctggagt 300
gttggctgca tatttgcaga aatgtttcct agaaagcctc tttttcgtgg aagttcagat 360
gttgatcaac taggaaaaaa cttggacgtg attggactcc cagg 404

<210> 2370
<211> 418
<212> DNA
<213> Homo sapiens

<400> 2370
cgttgctgtc gatgggacta gattctaaaa tttatttggg accatgggaa tgatagttgg 60
gaagaaaact atttgcacac gacagatttc tagatacttt ttgctgctag ttttatgtaa 120
tatttattga acattttgac aaatatttat ttttgtaagc ctaaaagtga ttctttgaaa 180
gtttaaagaa acttgaccaa aagacagtac aaaaacactg gcacttgaat gttgaatgtc 240

accgtatgcg tgaaattata tatttcgggg tagtgtgagc ttttaatgtt taagtcatat 300
taaactctta agtcaaatta agcagacccg gcgttggcag tgtagccata actttctgat 360
gttagtaaaa acaaaattgg cgacttgaaa ttaaatcatg ccaaggtttt gatacact 418

<210> 2371
<211> 400
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 2371
cgttgctgtc gagattttca agtgtattgt gccttgctct aaaactttta ttaagtaggt 60
gcacttgaca gtattgaggt catttgttat ggagctattt caattagtct aggtttaggc 120
ccttgtacat tttgcccata actttttaca aagtacttct tttattgcac attcagagaa 180
ttttatatat atgtcttgtg tgcgtgtcct taaacttcca atcttacttt gtctcttgga 240
gattgttgaa cgcagcttgt ctaggaaggg gatgggacta gattctaaaa tttatttggg 300
accatgggaa tgatagttgg gaagaaaact atttgcacac gacagatttc tagatacttt 360
ctgctgctag ntttatgtga tatttattga acattttgag 400

<210> 2372
<211> 385
<212> DNA
<213> Homo sapiens

<400> 2372
cgttgctgtc gaaaactttt attaagtagg tgcacttgac agtattgagg tcatttgtta 60
tggtgctatt tcaattagtc taggtttagg cccttgtaca ttttgcccat aacttttac 120
aaagtacttc ttttattgca cattcagaga attttatata tatgtcttgt gtgcgtgtcc 180
ttaaacttcc aatcttactt tgtctcttgg agattgttga acgcagcttg tctaggaagg 240
ggatgggact agattctaaa atttatttgg gaccatggga atgatagttg ggaagaaaac 300
tatttgcaca cgacagattt ctagatactt tttgctgcta gttttatgta atatttattg 360
aacattttga caaatattta ttttt 385

<210> 2373
<211> 375
<212> DNA
<213> Homo sapiens

<400> 2373
cgttgctgtc gatcccctg gcccaggatc atgaggatga gaatgaagaa ggtggtgagg 60
tcccctgggc ccegcctgaa ggatcagagg cagcagagga ggcagcccc agtgaccgca 120
tgccgtcagc ccggcccccc tcgccgccac tgtcaagctg ggagcgggtg tcacggctca 180
tggaggagga ccctgccttc cgtcgtggtc gtcttcgctg gctcaagcag gagcagctac 240
ggctgcaggg actgcagggc tctgggggcc ggggcggggg gctgcgcagg cccccagccc 300
gctttgtgcc ccctcacgac tgcaagctac gcttcccctt caagagcaac ccccagcacc 360
gggagtcttg gccag 375

<210> 2374
<211> 380
<212> DNA
<213> Homo sapiens

<400> 2374

cgttgctgtc ggaggtcccc tgggccccgc ctgaaggatc agaggcagca gaggaggcag 60
cccccagtga ccgcatgccg tcagccccgc ccccctcgcc gccactgtca agctgggagc 120
gggtgtcacg gctcatggag gaggaccctg ccttccgtcg tggtcgtctt cgctggctca 180
agcaggagca gctacggctg cagggactgc agggctctgg gggccggggc gggggctgc 240
gcaggccccc agcccgcttt gtgcccctc acgactgcaa gctacgcttc cccttcaaga 300
gcaaccccca acaccgggag tcttggccag ggatggggag cggggaggct ccaactccgg 360
tccaaccccc tgaggaggcg 380

<210> 2375
<211> 373
<212> DNA
<213> Homo sapiens

<400> 2375
cgttgctgtc ggccgccact gtcaagctgg gagcgggtgt cacggctcat ggaggaggac 60
cctgccttcc gtcgtggtcg tcttcgctgg ctcaagcagg agcagctacg gctgcaggga 120
ctgcagggct ctgggggccg gggcgggggg ctgcgcaggc ccccagcccg ctttgtgccc 180
cctcacgact gcaagctacg cttcccccttc aagagcaacc cccagcaccg ggagtcttgg 240
ccagggatgg ggagcgggga ggctccaact ccgctccaac cccctgagga ggtcactccc 300
catccagcca cccctgcccg ccggcctccg agtccccgaa ggtcccacca tccccgcagg 360
aactccctgg atg 373

<210> 2376
<211> 310
<212> DNA
<213> Homo sapiens

<400> 2376
attacagtac agaagaaagt gagtcagtgg tgggagagac tcacaaagca ggaaaagcga 60
ccactgtttt tggctcctga ctttgatcgt tggctggatg aatctgatgc ggaaatggag 120
ctcagagcta aggaagaaga gcgcctaaat aaactccgac tggaaagcga aggctctcct 180
gaaactctta caaacttaag gaaaggatac ctgtttatgt ataatcttgt gcaattcttg 240
tgattctcct ggatctttgt caacctgact gtgcgattct gtatcttggg aaaagagtcc 300
ttttatgaca 310

<210> 2377
<211> 426
<212> DNA
<213> Homo sapiens

<400> 2377
cgttgctgtc gggaggagga ccctgccttc cgtcgtggtc gtcttcgctg gctcaagcag 60
gagcagctac ggctgcaggg actgcagggc tctgggggcc ggggcggggg gctgcgcagg 120
cccccagccc gctttgtgcc ccctcacgac tgcaagctac gcttcccctt caagagcaac 180
ccccagcacc gggagtcttg gccagggatg gggagcgggg aggctccaac tccgctccaa 240
ccccctgagg aggtcactcc ccatccagcc acccctgccc gccggcctcc gagtccccga 300
aggtcccacc atccccgcag gaactccctg gatggagggg gccgatcccg gtgaaggggt 360
tctgcacagc ctgaacccca gcacttccag cccaaaaagc acaactctta tccccagcca 420
ccccat 426

<210> 2378
<211> 354
<212> DNA
<213> Homo sapiens

<400> 2378
ggacacatca gcccaaggag tactagaggc acaaatatgc cagctacctt tggacatttg 60

gcaggggat acgatggcca atattatgga tatctttgga gtgaagtatt ttccatggat 120
atgttttaca gctgttttaa aaaagaaggg ataatgaatc cggaggttgg aatgaaatac 180
agaaacctaa tcctgaaacc tgggggatct ctggacggga tggacatgct ccacaatttc 240
ttgaaacgtg aggccaacca aaaagcgttc ctaatgagta gaggcctgct tgctcccgga 300
actggggaac tttgggagcc gggcatgtct ggaggaatag tcgaaatccc catg 354

<210> 2379
<211> 450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(450)
<223> n = A,T,C or G

<400> 2379
ggatgcgtag acgcacgtgn tntttgagga gaccccctca tacgcgcgcg tgcttttttg 60
gccgaagcgg tctacgtgtg agataacacg acagaggggg agcccatgga gtactaaagg 120
cacaaatatg ccagctacct ttggacattt ggcaggggga tacgatggcc aatattatgg 180
atatctttgg agtgaagtat tttccatgga tatgttttac agctgtttta aaaaagaagg 240
gataatgaat ccggaggttg gaatgaaata cagaaaccta atcctgaaac ctgggggatc 300
tctggacggc atggacatgc tccacaattt cttgaaacgt gagccaaacc aaaaagcgtt 360
cctaatgagt agaggcctgc atgctccgtg aactggggat ctttggtagc cgtccatgtc 420
tggaggacaa gtcgacatca ccatgtgttt 450

<210> 2380
<211> 418
<212> DNA
<213> Homo sapiens

<400> 2380
catcgattcg aattccgttg ctgtcgccca cctctactgt ttgaaaaaat acatcgtgga 60
tttcctaatg gaaaatgggt caataacttc tatccggagt gaactgattc catatttagt 120
gagaaaacag ttttcctcag cttcctcaca acagggacaa gaagaaaaag aggaggatct 180
aaagaaaaag gagctgaagt ccttagatat ctacagtttt ataaaagaag ccaatacact 240
gaacctggct ccctatgatg cctgctggaa tgcctgtcga ggagacaggt gggaagactt 300
gtccagatca caggtgcgct gctatgtcca catcatgaaa gaggggctct gctctcgagt 360
gagcacactg ggactctaca tggaagcaaa cagacaggtg cccaaattgc tgtctgct 418

<210> 2381
<211> 408
<212> DNA
<213> Homo sapiens

<400> 2381
cgttgctgtc ggaaatcaac tgtaagtgct taaagacatt gtctgtctct gaggatagaa 60
gtatctgcct gcagccaaga cttcattttg atggcaaata cattgtctgt agttcagcac 120
ttggtctcta ccagtgggac tttgccagtt atgatattct cagggtcatc aagactcctg 180
agatagcaaa cttggccttg cttggctttg gagatatctt tgccctgctg tttgacaacc 240
gctacctgta catcatggac ttgcggacag agagcctgat tagtcgctgg cctctgccag 300
agtacaggaa atcaaagaga ggctcaagct tcctggcagg cgaagcatcc tggctgaatg 360
gactggatgg gcacaatgac acgggcttgg tctttgccac cagcatgg 408

<210> 2382
<211> 382
<212> DNA

<213> Homo sapiens

<400> 2382
cgttgctgtc gccggagccg aaacaccggt aggagcgggg aggtgggtac tacacaaccg 60
tctccagcaa tgaccaatga agctggagct cctcggctta tgataactca tattgtaaac 120
cagaacttca aatcctatgc tggggagaaa attctgggac ctttccataa gcgcttttcc 180
tgtattatcg ggccaaatgg cagtggcaaa tccaatgtta ttgattctat gcttttgtg 240
tttggctatc gagcacaaaa aataagatct aaaaaactct cagtattaat acataattct 300
gatgaacaca aggacattca gagttgtaca gtagaagttc attttcaaaa gataattgat 360
aaggaagggg atgattatga ag 382

<210> 2383
<211> 326
<212> DNA
<213> Homo sapiens

<400> 2383
gagtacagct ctctggaaca tgagagtgca aggggtgtga ttgagtgttt gaagattgtc 60
acacgagcca agtctcagcg gattgcaaag ttcgcctttg actatgccac caagaagggg 120
cggggcaagg tcactgctgt ccacaaggcc aacatcatga aacttgggga tgggttgttc 180
ctgcagtgct gtgaggaagt tgctgaactg taccccaaaa tcaaatttga gacaatgatc 240
atagacaact gctgcatgca gctggtgcag aatccttacc agtttgatgt gcttgtgatg 300
cccaatctct atgggaacat tattga 326

<210> 2384
<211> 404
<212> DNA
<213> Homo sapiens

<400> 2384
cgttgctgtc ggaggtgacc aagcaattag aggtgataac agcccaagac actgtaatta 60
aagctaaata tgcagaagtg gcaaaacaca aggagcaaaa caatgattct cagcttaaaa 120
ttaaggaatt agaccacaac atcagcaaac ataaacggga ggctgaagat ggtgctgcaa 180
aggtatccaa aatgttgaaa gattatgact ggattaatgc agagagacac ctctttggcc 240
aacccaatag tgcctatgat ttcaaaacta acaaccctaa agaagctggt cagagacttc 300
agaagttgca agaaatgaag gagaaactag gaagaaatgt caatatgaga gctatgaatg 360
tattgacaga agctgaagag cgatacaatg acttgatgaa gaaa 404

<210> 2385
<211> 388
<212> DNA
<213> Homo sapiens

<400> 2385
cgttgctgtc gctttgtgac aacagtttag gacttatctc tgagaatctg gaaacatggg 60
gaatgtgctc aaactatccg acttccagct cagtctatat ggtgctgctg tgtgctcgac 120
aatggtgaca ttgtggttgt gatggcatta ttagagtgct tacagaatca gaagatcgaa 180
cagcaagtgc tgaagaaatc aaggcttttg aaaaagaact gtctcacgca accattgatt 240
ctaaaactgg cgatttaggg gacatcaatg ctgagcagct tcctgggagg gaacatctta 300
atgaacctgg tactagagaa ggacagactc gtctaatcag agatggggag aaagtcgaag 360
cctatcagtg gagtgttagt gaagggag 388

<210> 2386
<211> 391
<212> DNA
<213> Homo sapiens

<400> 2386
cgttgctgtc gaaaatttgt taacccagaa gatgttgcca gactgatatt tagtaaaatg 60
aaagaaacgg cacattctgt attgggctca gatgcaaatg atgtagttat tactgtcccg 120
tttgattttg gagaaaagca aaaaaatgct cttggagaag cagctagagc tgctggattt 180
aatgttttgc gattaattca cgaaccgtct gcagctcttc ttgcttatgg aattggacaa 240
gactccccta ctggaaaaag caatattttg gtgtttaagc ttggaggaac atccttatct 300
ctcagcgtca tggaagttaa cagtggaata tatcgggttc tttcaacaaa cactgatgat 360
aacatcggtg gtgcacattt cacagaaacc t 391

<210> 2387
<211> 340
<212> DNA
<213> Homo sapiens

<400> 2387
gagtacagct ctctggaaca tgagagtgca aggggtgtga ttgagtgttt gaagattgtc 60
acacgagcca agtctcagcg gattgcaaag ttcgcctttg actatgccac caagaagggg 120
cggggcaagg tcactgctgt ccacaaggcc aacatcatga aacttgggga tgggttgttc 180
ctgcagtgct gtgaggaagt tgctgaactg taccccaaaa tcaaatttga gacaatgatc 240
atagacaact gctgcatgca gctggtgcaa aatccttacc agtttgatgt gcttgtgatg 300
cccagtctct atgggaacat tattgacaat ctggctggtg 340

<210> 2388
<211> 411
<212> DNA
<213> Homo sapiens

<400> 2388
cgttgctgtc ggattctgaa aagttaattc ctgtaccaat ggtgggtttt aaggaacttc 60
tccgaagact gaaggttcaa gatcagatga ctaagcagca tcaaaccaga ttagatatca 120
tatctgaaga tattagtgag ctacaaaaga atcaaactac atctgtagcc aaaattgcac 180
aatacaagag gaaactcatg gatctttccc atagaacttt acaggtccta atcaaacagg 240
aaattcaaag gaagagtggt tatgccattc aggctgatga agagcagttg cgagttcagc 300
tggatacgat tcagggtgaa ctaaatgcac ctactcagtt caagggccga ctaaatgaat 360
tgatgtctca aatcaggatg cagaatcatt ttggagcagt cagatctgaa g 411

<210> 2389
<211> 442
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(442)
<223> n = A,T,C or G

<400> 2389
tcgattcgaa ttccgttgct gtcgatgcta tgcttgcacc accagagggt caaactgttt 60
tggatggtct ggagttcaag gttgccttaa gaaatacctg gaaagaaaac ctaactgaac 120
ttagtggtgg tcagaggtct ttagtggcct tgtcattaat actgtccatg cttctcttca 180
aacctgctcc aatttatatc cttgatgagg tagatgcagc cttggatctt tctcataccc 240
aaaacattgg acagatgctg cgtactcatt tcacacattc tcagttcatt gtggtgtcac 300
taaaagaagg tatgttcaac aatgcaaacg ttcttttcaa aaccaagttt gtggatggtg 360
tttctacagt agccagattt actcaatgtc aaaatggaaa gatttcatag gaagcanaat 420
ccaaggcaga accacccana gg 442

<210> 2390

<211> 408
<212> DNA
<213> Homo sapiens

<400> 2390
cgttgctgtc gggactttgg gtctattttt tctactcttt tgcctggtgc taatgctatg 60
cttgcaccac cagagggtca aactgttttg gatggtctgg agttcaaggt tgccttagga 120
aatacctgga aagaaaacct aactgaactt agtggtggtc agaggtcttt agtggccttg 180
tcattaatac tgtccatgct tctcttcaaa cctgctccaa tttatatcct tgatgaggta 240
gatgcagcct tggatctttc tcataccaa aacattggac agatgctgcg tactcatttc 300
acacattctc agttcattgt ggtgtcacta aaagaaggta tgttcaacaa tgcaaacgtt 360
cttttcaaaa ccaagtttgt ggatggtgtt tctacagtag ccagattt 408

<210> 2391
<211> 356
<212> DNA
<213> Homo sapiens

<400> 2391
ctggactgaa atataaacca gtgactaacc aggttgagtg tcacccatac ctcacacagg 60
agaaactgat ccagtactgc cactccaagg gcatcaccgt tacggcctac agccccctgg 120
gctctccgga tagaccttgg gccaagccag aagacccttc cctgctggag gatcccaaga 180
ttaaggagat tgctgcaaag cacaaaaaaa ccgcagccca ggttctgatc cgtttccata 240
tccagaggaa tgtgattgtc atccccaagt ctgtgacacc agcacgcatt gttgagaaca 300
ttcaggtctt tgactttaaa ttgagtgatg aggagatggc aaccatactc agcttt 356

<210> 2392
<211> 400
<212> DNA
<213> Homo sapiens

<400> 2392
cgttgctgtc ggtccggagt ataggaatat gcagaaatag gatatgatgt ttcagcttct 60
ccgaggtctg gactttcttc attcacaccg agtagtgcat cgcgatctaa aaccacagaa 120
cattctggtg accagcagcg gacaaataaa actcgctgac ttcggccttg cccgcatcta 180
tagtttccag atggctctaa cctcagtggt cgtcacgctg tggtacagag cacccgaagt 240
cttgctccag tccagctacg ccacccccgt ggatctctgg agtgttggct gcatatttgc 300
agaaatgttt cgtagaaagc ctctttttcg tggaagttca gatgttgatc aactaggaaa 360
aatcttggac gtgattggac tcccaggaga agaagactgg 400

<210> 2393
<211> 364
<212> DNA
<213> Homo sapiens

<400> 2393
gcacttccag atcgagaagc tcttgaacaa acctcgactg aaatataaac cagtgactaa 60
ccaggttgag tgtcacccat acctcacgca ggagaaactg atccagtact gccactccaa 120
gggcatcacc gttacggcct acagcccccc gggctctccg gatagacctt gggccaagcc 180
agaagaccct tccctgctgg aggatcccaa gattaaggag attgctgcaa agcacaaaaa 240
aaccgcagcc caggttctga tccgtttcca tatccagagg aatgtgattg tcatccccaa 300
gtctgtgaca ccagcacgca ttgttgagaa cattcaggtc tttgacttta aattgagtga 360
tgaa 364

<210> 2394
<211> 436
<212> DNA

<213> Homo sapiens

<400> 2394
atcccatcga ttttcaaaag gacgtaatac tccactgtgc gacagctttg ttttccggaa 60
agttcgaagc ttgctagggg gaaatattcg tctcctgttg cgtggaggcg ctccactttc 120
tgcaaccacg cagcgattca tgaacatatg tttctgctgt cctgttggtc agggatacgg 180
cctcactgaa tctgctgggg ctggaacaat ttccgaagtg tgggactaca atactggcag 240
agtgggagca ccattagttt gctgtgaaat caaattataa aactgggagg aaggtggata 300
ctttaatact gataagccac accccagggg tgaaattctt attgagggcc aaagtgtgac 360
aatggggtac tacaaaaatg aagcaaaaac aaaagctgat ttctttgaag atgaacatgg 420
acaaaggtgg ctctgg 436

<210> 2395
<211> 382
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(382)
<223> n = A,T,C or G

<400> 2395
cgttgctgtc ggcaagtgct gaagaaatca aggcttttga aaaagaactg tctcacgcaa 60
ccattgattc taaaactggc gatttagggg acatcaatgc tgagcagctt cctgggaggg 120
aacatcttaa tgaacctggt actagagaag gacagactcg tctaatcaga gatggggaga 180
aagtcgaagc ctatcagtgg agtgttagtg aagggaggtg gataaaaatt ggtgatgttg 240
ttggctcatc tggtgctaat cagcaaacat ctggaaaagt tttatatgaa gggaaagaat 300
ttgattatgt tttctcaatt gatgtcaatg aaggtggacc atcatataaa ttgccatata 360
ataccagtga tgacccttgg tn 382

<210> 2396
<211> 429
<212> DNA
<213> Homo sapiens

<400> 2396
tcccatcgat tcgaattccg ttgctgtcga tgttctagaa ttaagtgctg agcttgtctg 60
tctttctcac ggatgccgca ttggttactc ttcaccacag actttagcag atcagtcttc 120
aaaaattaaa aaaggaagca aaggggatac atccatgttg aaaccaacac tgatggcagc 180
agttccggaa atcatggatc ggatctacaa aaatgtcatg aataaagtca gtgaaatgag 240
tagttttcaa cgtaatctgt ttattctggc ctataattac aaaatggaac agatttcaaa 300
aggacgtaat actccactgt gcgacagctt tgttttccgg aaagttcgaa gcttgctagg 360
gggaaatatt cgtctcctgt tgtgtggtgg cgctccactt tctgcaacca cgcagcgatt 420
catgaacat 429