



US 20250258170A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2025/0258170 A1**

Rosati et al.

(43) **Pub. Date:** **Aug. 14, 2025**

(54) **PROTEINS AND T-CELLS INVOLVED IN CHRONIC INFLAMMATORY DISEASES**

(71) Applicant: **Christian-Albrechts-Universität zu Kiel**, Kiel (DE)

(72) Inventors: **Elisa Rosati**, Kiel (DE); **Andre Franke**, Kronshagen (DE); **Petra Bacher**, Kiel (DE); **Ilgar Mamedov**, Moscow (RU)

(73) Assignee: **Christian-Albrechts-Universität zu Kiel**, Kiel (DE)

(21) Appl. No.: **18/723,255**

(22) PCT Filed: **Dec. 22, 2022**

(86) PCT No.: **PCT/EP2022/087583**

§ 371 (c)(1),
(2) Date: **Jun. 21, 2024**

(30) **Foreign Application Priority Data**

Dec. 22, 2021 (EP) 21217058.3

Publication Classification

(51) **Int. Cl.**

G01N 33/569 (2006.01)

C07K 16/28 (2006.01)

G01N 33/68 (2006.01)

(52) **U.S. Cl.**

CPC ... **G01N 33/56972** (2013.01); **C07K 16/2809** (2013.01); **G01N 33/6893** (2013.01); **G01N 2800/065** (2013.01)

(57)

ABSTRACT

A protein comprising an amino acid sequence according to SEQ ID NO: 1, wherein the amino acid in position 4 of SEQ ID NO: 1 is selected from the group consisting of N, S, R, T and I, preferably consisting of N, S and R and wherein the amino acid in position 5 of SEQ ID NO: 1 is selected from the group consisting of R, V, L, F, M, I, H, S, T, A, P and G, with the proviso that the amino acid sequence is not SEQ ID NO: 24.

Specification includes a Sequence Listing.

PROTEINS AND T-CELLS INVOLVED IN CHRONIC INFLAMMATORY DISEASES

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application is the U.S. National Stage of International Patent Application No. PCT/EP2022/087583, filed Dec. 22, 2022, and claims priority to European Patent Application No. 21217058.3, filed Dec. 22, 2021.

SEQUENCE LISTING

[0002] The instant application contains a Sequence Listing which has been submitted electronically in XML format and is hereby incorporated by reference in its entirety. Said XML file, created on Jan. 27, 2025, is named "117948-0112_SL.xml" and is 1,078,193 bytes in size.

FIELD

[0003] The present invention relates to proteins comprising an amino acid sequence according to a specific motif. The invention further relates to a nucleotide sequence encoding for such an amino acid sequence and a T-cell comprising the protein according to the invention. Further, the invention relates to the use of a protein according to the invention or a T-cell according to the invention or an mRNA according to the invention in the research for a medicament for treatment of a chronic inflammatory disease or in the development of an antibody directed against the protein and/or the T-cell and/or the mRNA according to the invention.

[0004] The invention further relates to an antibody directed against an epitope of the protein according to the invention.

STATE OF THE ART

[0005] Dysregulated T cell reactions against intestinal antigens are considered to be a causal or driving factor for chronic inflammatory diseases, especially inflammatory bowel diseases (IBD). For IBD and for other inflammatory and autoimmune diseases, e.g. multiple sclerosis or diabetes, the excessive immune response may be directed against common, still unknown, disease-driving antigens. In genetically predisposed hosts, antigens derived from a dysbiotic microbiome may come into contact with T cells through the damaged intestinal epithelial barrier, which may lead to an uncontrolled and dysregulated immune response. As such, it may be possible to identify specific disease-associated T cells within the peripheral blood and/or at the intestinal inflammation site of IBD patients.

[0006] Although the two main forms of IBD, namely Crohn's disease (CD) and ulcerative colitis (UC) are often referred to as generally "IBD", they are two independent diseases with different disease progression and characteristics. CD may develop in any part of the gastrointestinal tract, mostly in the small intestine, while UC develops in the colon only. Both diseases are T-cell mediated, different T cell subsets may but do not have to play a role in disease pathogenesis and progression. Markers distinguishing the two diseases exist but are limited, sometimes resulting in incorrect diagnosis. Further insights differentiating the two forms would help in better understanding, diagnosis and treatment of the diseases.

[0007] Most alpha/beta T cells are characterized by a unique T-cell receptor (TCR), formed by an alpha and beta chain. T cells recognize antigenic peptides presented by the major histocompatibility complex (MHC). Upon recognition of an antigen via the TCR, T cells may expand clonally, resulting in a population of cells with identical TCRs ("clonotypes"). The TCR repertoire, defined as the collection of unique TCRs, is extremely variable, with up to 10^{16} unique clonotypes present in a single individual. Therefore, the composition of the TCR repertoire, i.e. the diversity of different TCRs or the expansion of individual clonotypes, can provide important insights into disease-associated alterations of the T cell reaction.

[0008] In general, there is a need for the identification of disease-associated T-cell clonotypes in chronic inflammatory disease patients, especially in IBD patients, which could be an important step towards (i) understanding the contribution of TCR repertoire changes to diseases' pathophysiology; (ii) the identification of pathogenic T cells of interest; (iii) the identification of pathogenic T cells' cognate antigens and (iv) the development of new diagnostic and therapeutic strategies. Previous studies identified expanded clonotypes in IBD intestinal samples compared to blood samples and correlated certain TCRs with disease recurrence after surgery.

[0009] In view of the state of the art, it was an object of the present invention to provide means for research and development of diagnostic and therapeutic strategies for chronic inflammatory diseases, especially for IBD.

DESCRIPTION

[0010] In a first inspect of the invention this object is solved by a protein comprising an amino acid sequence according to SEQ ID NO: 1, wherein the amino acid in position 4 of SEQ ID NO: 1 is selected from the group consisting of N, S, R, T and I, preferably consisting of N, S and R and wherein the amino acid in position 5 of SEQ ID NO: 1 is selected from the group consisting of R, V, L, F, M, I, H, S, T, A, P and G, with the proviso that the amino acid sequence is not SEQ ID NO: 24.

[0011] Surprisingly, as result of the inventors' research there is an amino acid sequence motif according to SEQ ID NO: 1 that is associated with the occurrence of inflammatory diseases, especially involved in the occurrence of IBD and more prevalently involved in Crohn's disease (CD).

[0012] As used herein a "protein" refers to a polypeptide with at least 60, preferably at least 80 and more preferably at least 100 amino acids.

[0013] Preferred is a protein according to the invention, wherein the amino acid in position 7 of SEQ ID NO: 1 is A or S, wherein A is preferred.

[0014] Preferably the protein according to the invention is a protein, wherein the amino acid sequence according to SEQ ID NO: 1 is selected from the group consisting of amino acid sequences SEQ ID NO: 2 to 295.

[0015] More preferably the protein according to the invention is a TCR.

[0016] As used herein, a "T-cell receptor", or "TCR", is a molecule found on the surface of T-cells, or T-lymphocytes, that is responsible for recognizing antigenic molecules, more preferably peptides or/and lipids, bound to mayor histocompatibility complex (MHC) or MHC-like molecules. The TCR is a heterodimer. There are two types of TCRs: $\alpha\beta$ TCR consisting of an alpha (α) chain and a beta (β) chain

(~95% of TCRs in humans) and $\gamma\delta$ TCR consisting of a gamma and delta chain (~5% of TCRs in humans). When the TCR engages with the antigen and MHC complex, the T-lymphocyte is activated through signal transduction, mediated by associated enzymes, co-receptors, specialized adaptor molecules, and activated or inactivated or re-leased transcription factors.

[0017] The TCR α and β chains are both composed of a variable part and a constant part. The diversity of the TCR is based mainly on genetic recombination of the DNA encoded segments, originating from the VDJ genes, in individual T cells. The process of recombination ultimately results in novel TCR amino acids sequences that allow for the recognition of antigens.

[0018] As used herein the “T-cell receptor”, and “TCR” relates both to naturally occurring T-cell receptors and recombinantly expressed T-cell receptors.

[0019] As used herein a T-cell, or a lymphocyte, is a type of lymphocytes (a subtype of white blood cells) that plays a central role in cell mediated immunity. T-cells can be distinguished from other lymphocytes, such as B-cells and natural killer cells, by the presence of a T-cell receptor on the cell surface. They are called T-cells because they mature in the thymus from thymocytes.

[0020] A protein of the invention is preferred wherein the amino acid sequence according to SEQ ID NO: 1 is comprised in the alpha chain of the TCR, more preferably in the CDR3 region.

[0021] As used herein the CDR3 region is the most variable region of a TCR. The CDR3 region of the TCR alpha chain is positioned at the junction between the V and the J TCR genes and is the result of the VDJ recombination process during T cell maturation in the thymus. The CDR3 region is the most studied region of the TCR, because has the highest contacts with the antigen.

[0022] According to the invention it is preferred that the amino acid sequence according to SEQ ID NO: 1 (or preferred sequence according to the invention) is encoded by the genes TRAV12-1 and/or TRAJ6.

[0023] Surprisingly the inventors could show that proteins according to the invention, especially the preferred proteins according to the invention were found in (human) patients affected by an inflammatory disease, especially an inflammatory bowel disease (IBD) and more especially Crohn's disease in a significant higher number as compared to healthy control or non-inflammatory disease control individuals. In addition, the cumulative abundance of the proteins according to the invention was also significantly higher in CD patients' blood.

[0024] Further, the presence and abundance of proteins according to the invention did not seem to correlate with any specific MHC-allele. Nor was found a correlation between the abundance of those proteins and other clinical parameters such as age, gender, disease severity or medication history.

[0025] In a second aspect of the invention the above object is solved by a T cell, comprising the protein of the invention. Preferably such a T cell is a human T cell.

[0026] More preferably the T cell according to the invention is a CD4 $^+$ cell and/or a CD8 $^+$ cell and/or a CD161 $^+$ cell, preferably a CD8 $^+$ cell.

[0027] CD4, CD8 and CD161 are proteins expressed on the surface of T lymphocytes or/and other immune cells. These proteins work as co-stimulatory molecules in different cellular signals, including but not limited to the TCR response.

[0028] A “CD4 $^+$ cell”, as used herein, is a cell that expresses the CD4 protein on its surface or expresses the mRNA encoding for the CD4 protein.

[0029] A “CD8 $^+$ cell”, as used herein, a cell that expresses the CD8 protein on its surface or expresses the mRNA encoding for the CD8 protein.

[0030] A “CD161 $^+$ cell”, as used herein, is a cell that expresses the CD161 protein on its surface or expresses the mRNA encoding for the CD161 protein.

[0031] The T cells according to the invention are a good basis for further research for medicaments and antibodies to be used in the treatment inflammatory diseases especially in the treatment of IBD and more especially in the treatment of CD.

[0032] In a third aspect of the invention the above object is solved by a nucleotide encoding for an amino acid sequence according to sequence ID NO: 1, preferably according to any of amino acid sequences SEQ ID NO: 2 to 295, wherein the nucleotide sequence more preferably is selected from the DNA sequences SEQ ID NO: 296 to 1205, with the proviso that DNA sequences SEQ ID NO: 638, 647, 655, 662, 721, 1020, 1098, 1130, 1137, 1147 and 1150 are excluded or an mRNA sequence encoded by a DNA sequence according to any of DNA sequence SEQ ID NO: 296 to 1205 with the proviso that DNA sequences SEQ ID NO: 364, 568, 580, 637, 638, 647, 655, 662, 721, 1020, 1098, 1130, 1137, 1147 and 1150 are excluded.

[0033] Preferably, a nucleotide sequence according to the invention is an mRNA sequence.

[0034] On basis of the information comprised in the other specification the persons skilled in the art easily recognises that the proteins according to the invention, that the T cells according to the invention and that the nucleotide sequences according to the invention can be used as markers for inflammatory bowel disease (IBD) and more especially for Crohn's disease. This includes also a protein comprising an amino acid sequence according to SEQ ID NO: 24 and a T cell comprising such an amino acid as well as a DNA or mRNA according to the invention and preferably also a DNA comprising the DNA sequences SEQ ID NO: 364, 568, 580, 637, 638, 647, 655, 662, 721, 1020, 1098, 1130, 1137, 1147 and 1150 or a mRNA comprising a sequences encoded by any of those DNA sequences.

[0035] It has further noted that those markers could be used the identification of inflammatory bowel disease in the patient and preferably for discrimination Crohn's disease in a patient from IBD other than Crohn's disease.

[0036] A fourth aspect of the present invention is a use of a protein according to the invention, or of a T cell according to the invention or of an mRNA according to the invention

in the research for a medicament for treatment of a chronic inflammatory disease preferably inflammatory bowel disease (IBD), with the proviso that amino acid sequence SEQ ID NO: 24 is not excluded, and DNA sequences SEQ ID NO: 364, 568, 580, 637, 638, 647, 655, 662, 721, 1020, 1098, 1130, 1137, 1147 and 1150 are not excluded.

[0037] More preferred is a use according to the invention, wherein the chronic inflammatory disease is IBD, preferably Crohn's disease (CD) or ulcerative colitis (UC), preferably CD, more preferably ileal CD and/or ileocolonic CD.

[0038] A fifth aspect according to the invention is a use of a protein according to the invention or a use of a T cell according to the invention or a use of an mRNA according to the invention in the development of an antibody directed against the protein and/or the T cell or the mRNA.

[0039] A preferred use according to the invention is a use wherein the antibody is directed against an epitope, comprising at least a part of the amino acid sequence according to SEQ ID NO: 1, wherein preferably the amino acid sequence according to SEQ ID NO: 1 is further defined as described above.

[0040] A sixth aspect of the invention is an antibody directed against an epitope, comprising at least a part of the amino acid sequence according to SEQ ID NO: 1, wherein preferably the amino acid sequence according to SEQ ID NO: 1 is further defined as above described and/or wherein the antibody is a monoclonal antibody.

[0041] A "monoclonal antibody" as used herein comprises antibodies with the same monovalent affinity, thus binding to the same epitope.

[0042] Certainly, in the sense of the present invention the antibodies according to the invention are preferably specific antibodies wherein "specific" means the antibody is able to bind the target epitope according to the invention and/or the antibody can discriminate between that epitope and another similar or dissimilar epitope.

[0043] A further aspect of the invention is the method of discriminating blood samples of IBD patients from blood samples of individuals without IBD, preferably a method of discriminating blood samples of Crohn's disease patients from blood samples of individuals without IBD and individuals with IBD other than Crohn's disease comprising the step of quantitatively assessing the abundance of proteins according to the invention and/or the abundance of T-cells according to the invention.

[0044] As shown in the examples, it is possible to identify IBD patients from blood samples and even preferably to discriminate Crohn's disease from other IBD diseases.

[0045] In view of the above, the person's skilled in the art also understands that the proteins according to the invention, the T cells according to the invention and the nucleotide sequence according to the invention could be helpful in prognosis and/or diagnosis of IBD and preferably of Crohn's disease.

EXAMPLES

Material and Methods

Example 1

Whole Blood Sample Collection

[0046] Phenotypic details for this collection are described in Table 1.

[0047] CD patient collection: BioCrohn is a non-interventional prospective registry of Crohn's disease patients undergoing biologics treatment which was established by the German "Competence Network IBD", Kiel, Germany in 2008. Samples included in this study were collected prior to the start of anti-TNF therapy (Infliximab).

[0048] To evaluate disease activity, the Harvey-Bradshaw Index (HBI) was used. This measure was employed to distinguish between inactive ($0 \leq HBI \leq 4$: remission) and active state of the disease ($5 \leq HBI \leq 7$: mild activity, $8 \leq HBI \leq 16$: moderate activity, $17 \leq HBI \leq \infty$: severe activity) (42), as described from the Canadian society of intestinal research. In total, whole blood samples of 109 CD patients were available for analysis. All patients had active disease at sampling time. Response to anti-TNF therapy was defined as a steroid-independent change from active disease ($HBI > 4$ at baseline) to an inactive state of the disease ($HBI < 4$ at 6 months after start of therapy). Accordingly, non-response to anti-TNF therapy was defined as the disease being consistently active at both time points under investigation ($HBI > 4$ at baseline and 6 months).

[0049] UC patient collection: blood samples from UC patients of the "whole blood collection" were recruited as part of a larger panel of patients with IBD, recruited in the Comprehensive Centre for Inflammation Medicine (CCIM), at the University Hospital Schleswig-Holstein, Campus Kiel (Germany). Samples for the present study were randomly selected among the available samples stored in the PopGen biobank. In total, whole blood samples of 36 UC patients were available.

[0050] Healthy control collection: blood samples were obtained from the PopGen control sample, consisting of a community-based sample from the Kiel area (Northern Germany) and of blood donors from the University Hospital Schleswig-Holstein, Campus Kiel(43). In total, 1316 individuals were recruited at baseline (between 2005 and 2007) and were re-examined at the second examination cycle; between 2010 and 2012; n=952)(44, 45). Participants filled-in questionnaires on health and nutrition, received a basic clinical examination and provided blood samples for research. For the present analyses, individuals with major diseases such as cancer, neurological and inflammatory diseases were excluded. In total, 99 whole blood samples were available. These samples were matched to the CD patients in regard to age and sex.

[0051] The study was approved by the local ethics committees (Ethics votes: A156/03 v. 29.7.2010, A156/03-3/15 v. 21.1.16, A156/03-2/13, A161/08). All study participants gave their written informed consent.

[0052] 2.5 ml of blood were drawn and stored in PAXgene tubes (Qiagen), following the manufacturer's instructions. Samples were stored at -80°C . Total RNA was isolated using the PAXgene blood miRNA kit (Qiagen) with automatic isolation using the Qiacube machine. 1,200 ng of total RNA were used for

TABLE 1

	Sample group		
	CD	UC	Healthy
Basic phenotype			
Samples	109	36	99
Gender, Male/Female (%)	43/65 (40/60%)	21/15 (58/42%)	41/58 (41/59%)
Age, mean ± std	40 ± 12	37 ± 13	48 ± 13
Montreal classification			
Age at diagnosis in years			
A1, <16) (%)	7 (6%)	—	—
A2, 17-40 (%)	74 (70%)	—	—
A3, >40 (%)	25 (24%)	—	—
Behaviour			
B1, inflammatory (%)	51 (47%)	—	—
B2, stricturing (%)	21 (19%)	—	—
B3, penetrating (%)	36 (34%)	—	—
Location			
L1, ileal (%)	29 (27%)	—	—
L2, colonic (%)	23 (21%)	—	—
L3, ileocolonic (%)	56 (52%)	—	—
Disease extent			
E1, proctitis (%)	—	3 (3%)	—
E2, left-sided UC (%)	—	16 (47%)	—
E3, extensive UC (%)	—	15 (44%)	—
Info not available (NA)	1	2	—
Disease activity			
HBI, mean ± std	11 ± 5	—	—
Mild activity, 5 ≤ HBI ≤ 7 (%)	37 (34%)	—	—
Moderate activity, 8 ≤ HBI ≤ 16 (%)	57 (53%)	—	—
Severe activity, 17 ≤ HBI ≤ ∞ (%)	14 (13%)	—	—
Partial Mayo score, mean ± std	—	3.3 ± 2	—
CAI, mean ± std	—	6.7 ± 4.3	—
Info not available (NA)	1	0	—
Medications			
Steroids, yes/no (%)	7/102 (6/94%)	14/22 (39/61%)	—
Treatment naïve yes/no/NA (%)	77/14/18 (70/13/17%)	0/0/36 (0/0/100%)	—
Responders to anti-TNF yes/no/NA (%)	46/60/3 (42/55/3%)	—	—

Example 2

Surgery Sample Collection

[0053] Samples were collected in collaboration with the Clinic for General and Thoracic Surgery of the University Hospital Schleswig-Holstein, Kiel, Germany. It is important to notice that for CRC tissue samples, macroscopically normal, non-tumour tissue was utilized. Sample details are provided in Table 2.

[0054] Sample collection included (1) one 9 ml whole blood EDTA tube from which PBMCs were isolated by density gradient centrifugation (Ficoll, GE Healthcare) and (2) resected intestinal mucosa. Tissues were cut into pieces of approximately 30-50 mg, snap-frozen and stored at -80° C. Details on the number of collected samples and intestinal resection location for each patient are available in Table 2, together with patients' basic phenotypic information.

[0055] Total RNA was isolated using the RNeasy mini kit from Qiagen following the manufacturer's instructions. Up

to 3,200 ng of total RNA were used for TCR library preparation. Details on the sorted T cell populations from additional surgery samples are described in the supplementary materials and methods as well as supplementary table 1.

TABLE 2

Surgery collection phenotype information. Information about the numbers of collected samples for each tissue is provided together with information about intestinal location of the sample and about therapy with steroids or immunosuppressants at time of surgery.

	CD	UC	CRC
Basic phenotype			
Samples	11	13	13
Gender, Male/Female (%)	4/7 (36/64%)	7/6 (54/46%)	8/5 (62/38%)
Age, mean ± std	40 ± 15	52 ± 16	69 ± 12

TABLE 2-continued

Surgery collection phenotype information. Information about the numbers of collected samples for each tissue is provided together with information about intestinal location of the sample and about therapy with steroids or immunosuppressants at time of surgery.

	CD	UC	CRC
Sample types			
Intestinal samples	11	13	9
Mesenteric lymph nodes	4	5	0
PBMCs	11	12	12
Intestine + PBMCs datasets	11	12	8
Resected tissue location			
Large intestine	4	13	13
Small intestine	7	0	0
Medications			
Steroids, yes/no/NA	4/5/2	7/6/0	0/0/13
Immunosuppressants, yes/no/NA	5/5/1	2/10/1	0/0/13

Example 3

TCR Library Preparation and Sequencing

[0056] Starting from total RNA, molecular-barcoded TCR cDNA libraries were prepared as previously described in M. V. Pogorelyy et al., *Persisting fetal clonotypes influence the structure and overlap of adult human T cell receptor repertoires*. *PLOS Computational Biology* 13, e1005572-e1005572 (2017), with minor modifications for both TCR α and TCR β chains. Briefly, cDNA synthesis was performed using SMARTScribe reverse transcriptase (Clontech, Takara) using primers for the TCR α and TCR β constant region. A unique molecular identifier (UMI), and a sample barcode of 6 nucleotides, were introduced via template-switching. cDNA synthesis was carried out for 60 minutes at 42° C. cDNA was then treated with Uracil DNA-Glycosylase (UDG, from New England Biolabs) and incubated for 30 min at 37° C. Samples were subsequently purified with the QIAquick PCR purification kit (Qiagen) and eluted in 50 or 100 μ l deionized water. Purified cDNA was then amplified with 2 consecutive PCRs, respectively 18 and 12 cycles, with purification after each PCR using MagSi-NGSprep Plus (MagnaMedics). Illumina compatible adapters and sample-specific barcodes were added during the second PCR. Quality and concentration of the libraries were measured with TapeStation D1000 (Agilent) and Qubit (Thermofisher). Libraries were pooled using 5 ng per library and sequenced on Illumina HiSeq2500 with a single-index Rapid Run of 2 \times 100 bp (whole blood) or on Illumina NovaSeq 6000 SP 2 \times 150 bp flow cell (surgery). Custom sequencing primers were added to the Illumina primers.

[0057] For the sorted surgery collection samples, libraries were prepared using human TCR profiling kit (MiLaboratory), according to the manufacturers' protocol. Libraries were sequenced on Illumina MiSeq 2 \times 150 bp or NovaSeq 6000 SP 2 \times 150 bp.

Example 4

TCR Data Pre-Processing

[0058] PCR and sequencing error correction were performed through identification and selection of unique

molecular identifiers using the software MiGEC, version 1.2.6. Filtered sequences were aligned on a TCR gene reference, clonotypes were identified, grouped and CDR3 sequence was identified using the software MiXCR, version 2.1.1 (first sample collection: blood collection) or version 3.0.14 (second collection: surgery collection). Clonotype tables containing clonotype counts, frequencies, CDR3 nucleotide and amino acid sequences and V(D)J genes were obtained and used for further analysis.

[0059] A total of 444 samples were analysed for bulk TCR repertoire.

Example 5

TCR Data Analysis

[0060] For statistical analysis, the Wilcoxon-Mann-Whitney U test was used unless otherwise indicated. Samples with less than 200 identified unique clonotypes were excluded from the analysis. TCRs found at a count inferior to 2 (singletons) or encoding for out of frame sequences or TCRs containing stop codons, were also excluded from further analyses.

[0061] Proportion analysis of TCR groups (CDR3length_Vgene_Jgene): For each disease group (CD, UC, healthy), the total number of TCR sequences being part of each TCR group (CDR3length_Vgene_Jgene) was calculated and divided by the number of total TCR sequences present in each disease group in order to normalize for differences in TCR number among disease groups. The proportion of TCRs of each TCR group was then compared between disease groups, either CD against UC, or against healthy controls, for both TCR alpha and TCR beta.

[0062] Fisher test on identified TCR groups of interest: using specific CDR3 and VJ gene combinations identified through the analysis of repertoire proportions (12aa_TRAV1-2_TRAJ33, 15aa_TRAV12-1_TRAJ6), we performed one-sided Fisher's exact test on the single TCRs of these groups to identify TCR alpha clonotypes respectively decreased (12aa_TRAV1-2_TRAJ33) or increased (15aa_TRAV12-1_TRAJ6) in CD patients versus healthy individuals, from the whole blood and surgery collections. We applied multiple testing correction through the Benjamini-Hochberg (BH) method(49), in order to control expected proportion of false discoveries amongst the rejected hypotheses (false discovery rate, FDR).

[0063] Analysis on specific sequences: TCR sequences from the identified group of CDR3length=15 amino acids, V gene=TRA12-1 and J gene=TRAJ6 that were found to be more abundant in CD patients as compared to controls in the whole blood sample collection were used for the logo plot which defined the specific clonotype motif CVV**A*GGSYIPTF (SEQ ID NO: 1). All sequences of the selected TCR group, carrying the motif were selected for further analysis. For each sample, the number of sequences according to the invention present in the sample as well as the sum of relative abundances (cumulative abundance) of CAIT sequences according to the invention were calculated.

[0064] The results can be found in the table 3 (amino acid sequences) and in the sequence protocol (SEQ ID NO: 2-295 (amino acid sequences) and SEQ ID NO: 296-1205 (DNA sequences)).

[0065] As can be seen from table 3 there are polypeptide sequences with higher occurrences. It has to been noted that

according to the invention a polypeptide sequence is the more preferred the higher the occurrence is according to table 3.

TABLE 3

TCR sequences		
SEQ ID NO	Occurrences	Sequence
2	144	CVVNLASGGSYIPTF
3	93	CVVNGASGGSYIPTF
4	88	CVVNSASGGSYIPTF
5	77	CVVNIASGGSYIPTF
6	77	CVVNPASGGSYIPTF
7	75	CVVNRASGGSYIPTF
8	72	CVVSLASGGSYIPTF
9	62	CVVNMASGGSYIPTF
10	55	CVVTLASGGSYIPTF
11	49	CVVNTASGGSYIPTF
12	43	CVVRLASGGSYIPTF
13	42	CVVRHASGGSYIPTF
14	38	CVVNVASGGSYIPTF
15	37	CVVSHASGGSYIPTF
16	36	CVVRVASGGSYIPTF
17	34	CVVRSASGGSYIPTF
18	33	CVVIPASGGSYIPTF
19	31	CVVNKAASGGSYIPTF
20	30	CVVRGASGGSYIPTF
21	30	CVVTPASGGSYIPTF
22	29	CVVNAASGGSYIPTF
23	29	CVVNFASGGSYIPTF
24	24	CVVSSASGGSYIPTF
25	23	CVVNQASGGSYIPTF
26	21	CVVRTASGGSYIPTF
27	19	CVVIHASGGSYIPTF
28	19	CVVNEASGGSYIPTF
29	19	CVVNHASGGSYIPTF
30	19	CVVRRASGGSYIPTF
31	18	CVVILASGGSYIPTF
32	18	CVVRIASGGSYIPTF
33	16	CVVRAASGGSYIPTF
34	16	CVVSPASGGSYIPTF
35	16	CVVSTASGGSYIPTF

TABLE 3-continued

TCR sequences		
SEQ ID NO	Occurrences	Sequence
36	16	CVVTHASGGSYIPTF
37	16	CVVTSASGGSYIPTF
38	16	CVVTVASGGSYIPTF
39	15	CVVNMAAGGSYIPTF
40	15	CVVSVASGGSYIPTF
41	15	CVVTAASGGSYIPTF
42	14	CVVKGASGGSYIPTF
43	12	CVVNGAPGGSYIPTF
44	12	CVVNIAAGGSYIPTF
45	12	CVVNMATGGSYIPTF
46	12	CVVPHASGGSYIPTF
47	12	CVVSAASGGSYIPTF
48	12	CVVTFASGGSYIPTF
49	11	CVVREASGGSYIPTF
50	11	CVVSFASGGSYIPTF
51	11	CVVSGASGGSYIPTF
52	11	CVVSIASGGSYIPTF
53	10	CVVIAASGGSYIPTF
54	10	CVVISASGGSYIPTF
55	10	CVVNMAAGGSYIPTF
56	9	CVVFHASGGSYIPTF
57	9	CVVRQASGGSYIPTF
58	9	CVVSRASGGSYIPTF
59	8	CVVIGASGGSYIPTF
60	8	CVVLHASGGSYIPTF
61	8	CVVNIATGGSYIPTF
62	8	CVVNYASGGSYIPTF
63	8	CVVRFASGGSYIPTF
64	8	CVVTLAGGGSYIPTF
65	7	CVVAHASGGSYIPTF
66	7	CVVIRASGGSYIPTF
67	7	CVVNGAAGGSYIPTF
68	7	CVVNIAGGGSYIPTF
69	7	CVVRMASGGSYIPTF
70	7	CVVTIASGGSYIPTF
71	6	CVVKHASGGSYIPTF
72	6	CVVKSASGGSYIPTF

TABLE 3-continued

TCR sequences		
SEQ ID NO	Occurrences	Sequence
73	6	CVVMGASGGSYIPTF
74	6	CVVNDASGGSYIPTF
75	6	CVVNRAPGGSYIPTF
76	6	CVVTGASGGSYIPTF
77	5	CVVALASGGSYIPTF
78	5	CVVDHASGGSYIPTF
79	5	CVVIFASGGSYIPTF
80	5	CVVIIASGGSYIPTF
81	5	CVVIVASGGSYIPTF
82	5	CVVKPASGGSYIPTF
83	5	CVVKRASGGSYIPTF
84	5	CVVKTASGGSYIPTF
85	5	CVVNLAAGGSYIPTF
86	5	CVVNSAAGGSYIPTF
87	5	CVVNSAGGGSYIPTF
88	5	CVVRKASGGSYIPTF
89	5	CVVSQASGGSYIPTF
90	4	CVVFLASGGSYIPTF
91	4	CVVFSASGGSYIPTF
92	4	CVVKAASGGSYIPTF
93	4	CVVKLASGGSYIPTF
94	4	CVVMHASGGSYIPTF
95	4	CVVNLAGGGSYIPTF
96	4	CVVNMAPGGSYIPTF
97	4	CVVNRAAGGSYIPTF
98	4	CVVN RATGGSYIPTF
99	4	CVVNVAAGGSYIPTF
100	4	CVVN VATGGSYIPTF
101	4	CVVN WASGGSYIPTF
102	4	CVVSKASGGSYIPTF
103	4	CVVSQAAGGSYIPTF
104	4	CVVTDASGGSYIPTF
105	4	CVVTYASGGSYIPTF
106	3	CVVGLASGGSYIPTF
107	3	CVVGTASGGSYIPTF
108	3	CVVIDASGGSYIPTF

TABLE 3-continued

TCR sequences		
SEQ ID NO	Occurrences	Sequence
109	3	CVVITASGGSYIPTF
110	3	CVVKVASGGSYIPTF
111	3	CVVLLASGGSYIPTF
112	3	CVVNGATGGSYIPTF
113	3	CVVNIAPGGSYIPTF
114	3	CVVNKAAGGSYIPTF
115	3	CVVNLRAGGSYIPTF
116	3	CVVNSAVGGSYIPTF
117	3	CVVNTAGGGSYIPTF
118	3	CVVN VAGGGSYIPTF
119	3	CVVTQASGGSYIPTF
120	3	CVVTTASGGSYIPTF
121	3	CVVYHASGGSYIPTF
122	3	CVVYLASGGSYIPTF
123	2	CVVADASGGSYIPTF
124	2	CVVAQASGGSYIPTF
125	2	CVVASASGGSYIPTF
126	2	CVVATASGGSYIPTF
127	2	CVVFGASGGSYIPTF
128	2	CVVHHASGGSYIPTF
129	2	CVVHVASGGSYIPTF
130	2	CVVINASGGSYIPTF
131	2	CVVIQASGGSYIPTF
132	2	CVVKEASGGSYIPTF
133	2	CVVKIASGGSYIPTF
134	2	CVVKKASGGSYIPTF
135	2	CVVKMASGGSYIPTF
136	2	CVVKRAGGGSYIPTF
137	2	CVVLGASGGSYIPTF
138	2	CVVLPASGGSYIPTF
139	2	CVVLSASGGSYIPTF
140	2	CVVLTASGGSYIPTF
141	2	CVVMPASGGSYIPTF
142	2	CVVNEAAGGSYIPTF
143	2	CVVNIALGGSYIPTF
144	2	CVVNIARGGSYIPTF
145	2	CVVNMAEGGSYIPTF

TABLE 3-continued

TCR sequences		
SEQ ID NO	Occurrences	Sequence
146	2	CVVNPATGGSYIPTF
147	2	CVVNSATGGSYIPTF
148	2	CVVPFASGGSYIPTF
149	2	CVVPPASGGSYIPTF
150	2	CVVPRASGGSYIPTF
151	2	CVVPSASGGSYIPTF
152	2	CVVPTASGGSYIPTF
153	2	CVVRLAGGGSYIPTF
154	2	CVVRPASGGSYIPTF
155	2	CVVRTARGGGSYIPTF
156	2	CVVRVAAGGGSYIPTF
157	2	CVVRYASGGSYIPTF
158	2	CVVSDASGGSYIPTF
159	2	CVVSGAVGGSYIPTF
160	2	CVVSLAGGGSYIPTF
161	2	CVVVHASGGSYIPTF
162	2	CVVVLASGGSYIPTF
163	1	CVVAFASGGSYIPTF
164	1	CVVAGASGGSYIPTF
165	1	CVVAPASGGSYIPTF
166	1	CVVAVASGGSYIPTF
167	1	CVVAWASGGSYIPTF
168	1	CVVDDASGGSYIPTF
169	1	CVVDQASGGSYIPTF
170	1	CVVEQASGGSYIPTF
171	1	CVVFAASGGSYIPTF
172	1	CVVFLAGGGSYIPTF
173	1	CVVFQARGGGSYIPTF
174	1	CVVFQASGGSYIPTF
175	1	CVVFRASGGSYIPTF
176	1	CVVFTASGGSYIPTF
177	1	CVVFVASGGSYIPTF
178	1	CVVGDASGGSYIPTF
179	1	CVVGIASGGSYIPTF
180	1	CVVGRASGGSYIPTF
181	1	CVVGVAAGGGSYIPTF

TABLE 3-continued

TCR sequences		
SEQ ID NO	Occurrences	Sequence
182	1	CVVGVASGGSYIPTF
183	1	CVVHDASGGSYIPTF
184	1	CVVHEASGGSYIPTF
185	1	CVVHLASGGSYIPTF
186	1	CVVHQASGGSYIPTF
187	1	CVHYASGGSYIPTF
188	1	CVVIPATGGSYIPTF
189	1	CVVISAPGGSYIPTF
190	1	CVVIYASGGSYIPTF
191	1	CVVKAAAGGGSYIPTF
192	1	CVVKDASGGSYIPTF
193	1	CVVKFASGGSYIPTF
194	1	CVVKGAGGGSYIPTF
195	1	CVVKGAPGGSYIPTF
196	1	CVVKLAVGGSYIPTF
197	1	CVVKNASGGSYIPTF
198	1	CVVKSAGGGSYIPTF
199	1	CVVKTAAGGGSYIPTF
200	1	CVVKTAGGGSYIPTF
201	1	CVVKVAGGGSYIPTF
202	1	CVVKYASGGSYIPTF
203	1	CVVLGAAGGGSYIPTF
204	1	CVVLVASGGSYIPTF
205	1	CVVMAASGGSYIPTF
206	1	CVVMKAEGGGSYIPTF
207	1	CVVMLASGGSYIPTF
208	1	CVVMRASGGSYIPTF
209	1	CVVMTASGGSYIPTF
210	1	CVVNAAAGGGSYIPTF
211	1	CVVNAAPGGSYIPTF
212	1	CVVNAARGGGSYIPTF
213	1	CVVNAATGGGSYIPTF
214	1	CVVNEAGGGSYIPTF
215	1	CVVNEATGGGSYIPTF
216	1	CVVNGAGGGSYIPTF
217	1	CVVNQAOGGSYIPTF
218	1	CVVNQARGGGSYIPTF

TABLE 3-continued

TCR sequences		
SEQ ID NO	Occurrences	Sequence
219	1	CVVNGAVGGSYIPTF
220	1	CVVNIAEGGSYIPTF
221	1	CVVNIAIGGSYIPTF
222	1	CVVNKAKGGSYIPTF
223	1	CVVNKAPGGSYIPTF
224	1	CVVNKATGGSYIPTF
225	1	CVVNLAVGGSYIPTF
226	1	CVVNMALGGSYIPTF
227	1	CVVNMAQGGSYIPTF
228	1	CVVNMRGGSYIPTF
229	1	CVVNNAPGGSYIPTF
230	1	CVVNNARGGSYIPTF
231	1	CVVNNASGGSYIPTF
232	1	CVVNPALGGSYIPTF
233	1	CVVNPAPGGSYIPTF
234	1	CVVNQAAGGSYIPTF
235	1	CVVNQATGGSYIPTF
236	1	CVVNRAGGGSYIPTF
237	1	CVVNSAEGGSYIPTF
238	1	CVVNSAKGGSYIPTF
239	1	CVVNTAAAGGSYIPTF
240	1	CVVNTAKGGSYIPTF
241	1	CVVNTAPGGSYIPTF
242	1	CVVNTARGGSYIPTF
243	1	CVVNVAPGGSYIPTF
244	1	CVVNWAAGGSYIPTF
245	1	CVVNWAGGGSYIPTF
246	1	CVVPEASGGSYIPTF
247	1	CVVPGASGGSYIPTF
248	1	CVVPLASGGSYIPTF
249	1	CVVPLATGGSYIPTF
250	1	CVVPPAPGGSYIPTF
251	1	CVVPVASGGSYIPTF
252	1	CVVQGASGGSYIPTF
253	1	CVVQHASGGSYIPTF
254	1	CVVQLASGGSYIPTF

TABLE 3-continued

TCR sequences		
SEQ ID NO	Occurrences	Sequence
255	1	CVVQSASGGSYIPTF
256	1	CVVRDASGGSYIPTF
257	1	CVVREAWGGSYIPTF
258	1	CVVRFARGGSYIPTF
259	1	CVVRGAEGGSYIPTF
260	1	CVVRHATGGSYIPTF
261	1	CVVRQAGGGSYIPTF
262	1	CVVRRAAGGSYIPTF
263	1	CVVRSATGGSYIPTF
264	1	CVVRTAQGGSYIPTF
265	1	CWVRVAGGGSYIPTF
266	1	CVVSEASGGSYIPTF
267	1	CVVSGAQGGSYIPTF
268	1	CVVSLAAGGSYIPTF
269	1	CVVSLAKGGSYIPTF
270	1	CVVSMASGGSYIPTF
271	1	CVVSPAPGGSYIPTF
272	1	CVVSQAGGGSYIPTF
273	1	CVVSRAMGGSYIPTF
274	1	CVVSSAVGGSYIPTF
275	1	CVVSTATGGSYIPTF
276	1	CVVTEASGGSYIPTF
277	1	CVVTGAAGGSYIPTF
278	1	CVVTIAEGGSYIPTF
279	1	CVVTNAPGGSYIPTF
280	1	CVVTPAPGGSYIPTF
281	1	CVVTRASGGSYIPTF
282	1	CVVTSARGGSYIPTF
283	1	CVVTSATGGSYIPTF
284	1	CVVTTAGGGSYIPTF
285	1	CVVVFAASGGSYIPTF
286	1	CVVVGASGGSYIPTF
287	1	CVVVMASGGSYIPTF
288	1	CVVVRASGGSYIPTF
289	1	CVVWGASGGSYIPTF
290	1	CVVWPASGGSYIPTF
291	1	CVVWTASGGSYIPTF

TABLE 3-continued

TCR sequences		
SEQ ID NO	Occurrences	Sequence
292	1	CVVYFASGGSYIPTF
293	1	CVVYGASGGSYIPTF
294	1	CVVYMAPGGSYIPTF
295	1	CVVYPASGGSYIPTF

Example 6

Single-Cell Analysis

[0066] Blood was drawn from three CD patients, 2 females and 1 male of age 29, 49 and 36 year old respectively, who were shown to have high abundance of TCRs according to the invention during bulk TCR analysis, as well as from three age and sex matched healthy controls. PBMCs were isolated by gradient centrifugation from EDTA blood tubes. CD3+ cells were enriched by MACS (Miltenyi Biotec).

[0067] For single-cell analysis, CD3+ (Vioble) CD45RO+ (PeViob770) memory T cells were sorted in CD8+ (Viogreen) and CD4+ (APCviob770) subpopulations. Cells were removed from the sorting chamber into pre-coated low-bind collection tubes and centrifuged for 5 min at 400×g, 4° C. Cells were re-suspended in PBS plus 0.04% BSA to a concentration of 1000 cells/ul.

[0068] Single-cell suspensions were loaded on a Chromium Chip G (10× Genomics) according to manufacturer's instructions for processing with the Chromium Next GEM Single Cell 5' Library and Gel Bead Kit v1.1. Depending on the number of cells available for each patient, a maximum of 20,000 cells were loaded for each reaction. TCR single-cell libraries were subsequently prepared from the same cells with the Chromium Single Cell V(D)J Enrichment Kit, Human T Cell. Libraries were sequenced on the Illumina NovaSeq 6000 machine with 2×100 bp for gene expression, aiming for 50,000 reads per cell and 2×150 bp and 5000 reads per cell for TCR libraries.

[0069] Single-cell T cell receptor repertoire clonotype tables were generated using the VDJ command of the Cellranger software, version 3.1.0 from 10×Genomics and using the VDJ reference version 2.0.0. Clonotype tables were filtered in order to include only cells which passed quality filtering in the gene expression analysis. In addition, clonotypes were stringently filtered for possible doublets by removing clonotypes (i) found in 1 cell only and containing more than 1 TCR alpha and 1 TCR beta (ii) containing more than 1 TCR alpha and no TCR beta sequence (iii) containing more than 1 TCR beta and no TCR alpha sequence (iv) containing more than 2 TCR alpha or more than 2 TCR beta sequences.

[0070] Gene expression matrices were generated through the COUNT command of Cellranger v3.1.0. from 10×Genomics and using the reference GRCh38 version 3.0. Data

were analyzed using the Seurat v3.2.3 R package (24). Cells with more than 400 but less than 3500 detected RNA features per cell and less than 8% mitochondrial RNA were retained for further analysis. Only genes present in at least 1% of the cells were considered. Also, only cells with a detected TCR were used. TCR VDJ genes were removed from gene expression counts to allow for an unbiased analysis. Data from multiple individuals were merged and batch effect correction by experimental day and sequencing run was performed using the Harmony package. 20 dimensions were used for performing principal component analysis (PCA) and uniform manifold approximation and projection (UMAP) in 3 dimensions. Clusters were identified using 0.4 resolution. Positive and negative marker genes were identified using Seurat FindMarkers function and the MAST method, considering only genes found in at least 25% of cells of each cluster.

[0071] Cells according to the invention were defined from TCR alpha of 15aa, TRAV12-1 and TRAJ6. Proportion of CAIT cells carrying certain TRBV genes was calculated on the number of unique CAIT clonotypes identified, independently from the number of cells carrying each clonotypes and originated by the same original clonotype by clonal expansion.

Example 7

Sample Collection and Cell Staining for Flow Cytometry Immunophenotyping

[0072] Whole blood samples were collected in 9 ml EDTA tubes.

[0073] Crohn's disease patients: samples were collected in collaboration with the Comprehensive Center for Inflammation Medicine (CCIM) of the University Hospital Schleswig-Holstein, Kiel, Germany. A total of 20 CD patients were recruited. Sample details are provided in Supplementary Table 5.

[0074] Healthy human blood: 16 samples were collected from volunteer workers at the University Hospital Schleswig-Holstein, Kiel, Germany.

[0075] Peripheral blood mononuclear cells (PBMCs) were isolated by standard density gradient (Biocoll, Biochrom, Berlin Germany) and freshly used for staining. PBMCs were washed with PBS+2 mM EDTA+0.5% BSA (PEB buffer) and then stained with a cell surface antibody cocktail for CD3 (OKT3, Biolegend), CD4 (M-T466, Miltenyi Biotec), CD8 (REA734, Miltenyi Biotec), CD14 (TÜK4, Miltenyi Biotec), CD20 (LT20, Miltenyi Biotec), CD161 (DX12, BD Biosciences), IL-18Ra/CD218a (REA1095, Miltenyi Biotec), TRAV1-2 (F1, Invitrogen), TRAV12-1 (REA179, Miltenyi Biotec), at room temperature for 30 min in the dark. Cells were washed again and resuspended in 300 uL of PEB buffer. Propidium Iodide (Miltenyi Biotec) was used to exclude dead cells. Data were acquired on a LSR Fortessa (BD Bioscience, San Jose, CA, USA). Flow cytometry data were analyzed using FlowJo (Treestar, Ashland, OR, USA) software.

TABLE 5

	Sample group	
	CD	Healthy
Basic phenotype		
Samples	20	16
Gender, M/F (%)	11/9 (55/45%)	7/9 (43/57%)
Age, mean ± std	44 ± 18	31 ± 8
Montreal classification		
Age at diagnosis in years		
A1, <16 (%)	3 (15%)	—
A2, 17-40 (%)	11 (55%)	—
A3, >40 (%)	4 (20%)	—
Info not available (NA)	2	—
Behaviour		
B1, inflammatory (%)	9 (45%)	—
B2, stricture (%)	5 (25%)	—
B3, penetrating (%)	4 (20%)	—
Info not available (NA)	2	—
Location		
L1, ileal (%)	8 (40%)	—
L2, colonic (%)	1 (12%)	—
L3, ileocolonic (%)	8 (23%)	—
Info not available (NA)	3	—
Disease activity		
HBI, mean ± std	3 ± 3	—
Remission, HBI ≤ 4	7 (35%)	—
Mild activity, 5 ≤ HBI ≤ 7 (%)	1 (5%)	—
Moderate activity, 8 ≤ HBI ≤ 15 (%)	1 (5%)	—
Severe activity, 16 ≤ HBI ≤ ∞ (%)	—	—
Info not available (NA)	11	—
CRP	6.9 ± 14	—

Results

Identification of TCRs Enriched in CD Patients' Blood

[0076] In CD patients, a group of TCR alpha chains defined by a 15 amino acids CDR3 region and with the gene combination TRAV12-1_TRAJ6 were enriched as compared to healthy controls. The Fisher's exact test confirmed that several clonotypes of the TRAV12-1_TRAJ6 group were present in more CD patients than controls. In detail, 10 clonotypes were significantly enriched after multiple comparison correction and further 3 were nominally significantly enriched. Clonotypes of this TCR group, identified as significantly enriched in CD, share the semi-invariant CDR3 motif CVV**A*GGSYIPTF (SEQ ID NO: 1).

[0077] While positions 4 and 5 of the identified motif are the most variable, positions 6 and 7 are more conserved and occupied by A and S amino acids respectively. Moreover, the predicted 3D structure of the TCR alpha CDR3 loop showed that positions 4 and 5 are mostly buried inside the TCR protein structure and may indirectly influence the loop conformation. Positions 6 and 7 are exposed and, together with positions 8 and 11, are predicted to be the most involved into epitope interaction. However, CDR3 loops are very flexible and may adapt to different conformations when

interacting with different epitopes, thus, in principle, all CDR3 amino acid positions, excluding the terminal 3-4 residues, may contact the antigen and influence binding affinity.

[0078] A higher number of different clonotypes comprising the motif according to the invention (different CDR3 regions) were found in CD patients as compared to healthy controls. In addition, they were more expanded in CD patients' blood and their cumulative abundance (the sum of their relative abundance in each sample) was accordingly significantly higher in CD patients (P-value=0.008).

[0079] The inventors also investigated whether the TCRs according to the invention were associated with phenotypic or clinical traits. No significant association was detected between the cumulative abundance or the number of TCRs according to the invention, and clinical parameters such as sex, age, smoking behaviour, disease location, disease severity or previous treatment for CD. Samples from CD patients were collected prior to start of treatment with anti-TNF biologics. A trend was observed, showing increased numbers of clonotypes comprising the motif according to the invention in patients non-responding to anti-TNF therapy (P-value=0.089). In patients affected by ileal or ileocolonic CD, TCRs according to the invention were more abundant as compared to colonic CD (P-value=0.07).

Clonotypes Comprising the Motif According to the Invention are Present in Both Blood and Intestinal Tissue of CD Patients

[0080] To verify the presence and abundance of TCRs according to the invention in CD, an independent sample collection including matched blood and intestinal tissue of 37 individuals undergoing bowel resection surgery (11 CD, 13 UC and 13 colon cancer (CRC) patients as disease controls was analysed; see Example 2). As in the first collection (Example 1), TCRs according to the invention were confirmed to be increased in number and more abundant in CD patients' blood (P-value=0.002). Clonotypes comprising the motif according to the invention were observed in $\frac{8}{11}$ (82%) CD, $\frac{4}{13}$ (31%) UC and $\frac{3}{13}$ (23%) CRC patients' blood. In $\frac{8}{11}$ (73%) CD patients, the abundance of TCRs according to the invention was higher than in any other analysed blood sample of the surgery collection. The same trend was observed in intestinal tissue. Clonotypes comprising the motif according to the invention were observed in higher numbers in the blood as compared to the gut. For a subset of patients (4 CD and 5 UC), intestinal mesenteric lymph nodes resected together with the inflamed intestinal tissue were also analysed. While most TCRs according to the invention were observed in the blood, few clonotypes comprising the motif according to the invention were also observed to be present in multiple analysed tissues of the same individual at the same time.

[0081] To answer the question whether T-cells comprising the motif according to the invention occur within a particular T cell compartment, blood and intestinal T cells were sorted in CD4+ naïve, CD4+ conventional memory, CD4+ regulatory and CD8+ T cells for 7 CD, 5 UC and 9 CRC additional patients. TCRs according to the invention were found in all analysed fractions, but at different frequencies. Cells according to the invention were most abundant in the CD8+ fraction, particularly in CD patients, with up to 22 TCRs

according to the invention detected per individual and higher cumulative abundance as compared to the other cell compartments.

[0082] For the three CD patients (Example 7) with a high proportion of cells according to the invention, the CD4+ and CD8+ memory fractions were FACS-purified and single-cell RNA gene expression and TCR sequencing using 10xGenomics' Chromium technology was made. The same analysis was performed for three sex- and age-matched healthy controls.

[0083] Cells according to the invention were identified at high abundance (22 to 238 cells per patient) in the three CD patients through their TCRs, while they were rare in healthy controls (0 to 2 CAIT cells per healthy individual). Analysis of TCR alpha/beta pairs showed diverse TCR beta chains associated with the semi-invariant alpha sequences according to the invention. Analysis of the TCR comprising the motif according to the invention alpha/beta chain pairing in clonotypes comprising the motif according to the invention, showed a preferential pairing (38-55% of clonotypes) with beta chains carrying the TRBV7-9 gene in all 3 patients. None of the identified paired TCR beta chains were found in any other individual of the previously analysed bulk TCR datasets (244 whole blood and 58 surgery samples). Thus, these TCR beta sequences seem to be private to single individuals or very rare in the examined population.

Immunophenotyping of CAIT Cells in CD Patients and Controls

[0084] To confirm frequency and phenotype of cells according to the invention identified by TCR and RNA sequencing, we set up an antibody panel for flow cytometry including the antibodies for the TCR V segments TRAV1-2 and TRAV12-1, defining MAIT and CAIT cells respectively, and known unconventional T cell markers such as CD161 (KLRB1) and IL18R. By analysing peripheral blood

samples of 20 randomly recruited CD patients and 16 healthy controls, we confirmed that decreased in the blood of CD patients. Cells according to the invention (CD3+ TRAV12-1+CD161+IL18R+), were enriched

[0085] The frequency difference between patients and controls was observed to be more pronounced in the CD8+ compartment. The same trend for cells according to the invention was observed in the CD4-CD8- and in the CD4+CD8+ fractions.

[0086] Using a single-cell transcriptomics approach (see manuscript), it could be showed that the identified T cells seem to have an unconventional innate-like phenotype.

[0087] Unconventional T cells are cells not binding the classic MHC alleles but rather MHC-like molecules as MR1 and CD1d. These molecules are less variable among people as compared to classic MHC alleles. Therefore, T cells reactive to MHC-like molecules are also more common among individuals. Therefore, the analysis of these cells and possible drug-discovery research also has higher applicability at population level as compared to a conventional T cell which may be rather private of single individuals.

[0088] We also performed a flow cytometry analysis of the T cells. A flow cytometry analysis looks at the protein markers expressed on the surface of the cells and helps to identify the cell phenotype and function. It was found that the cell population including the clonotypes is increased in both CD and UC patients as compared to healthy controls. In the analysis, the cell population was defined to be CD161+TRAV12-1+, where TRAV12-1 is the part of the TCR protein encoded by the TRAV12-1 variable gene.

[0089] Because of its shared presence among individuals, these latest results indicate that this population including but not limited to the T cell clonotypes we identified and described in the invention, plays a role in other diseases rather than CD, including UC but potentially also other chronic inflammatory conditions.

SEQUENCE LISTING

```

Sequence total quantity: 1205
SEQ ID NO: 1      moltype = AA  length = 15
FEATURE          Location/Qualifiers
VARIANT          4..5
note = misc_feature - Xaa can be any naturally occurring
amino acid
7
note = misc_feature - Xaa can be any naturally occurring
amino acid
1..15
mol_type = protein
organism = Homo sapiens

VARIANT
source

SEQUENCE: 1
CVVXXAXGGS YIPTF

SEQ ID NO: 2      moltype = AA  length = 15
FEATURE          Location/Qualifiers
source          1..15
mol_type = protein
organism = Homo sapiens

SEQUENCE: 2
CVVNVLASGGS YIPTF

SEQ ID NO: 3      moltype = AA  length = 15
FEATURE          Location/Qualifiers
source          1..15
mol_type = protein
organism = Homo sapiens

SEQUENCE: 3

```

15

15

-continued

CVVNGASGGS YIPTF	15
SEQ ID NO: 4 FEATURE source SEQUENCE: 4	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNSASGGS YIPTF	15
SEQ ID NO: 5 FEATURE source SEQUENCE: 5	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNIASGGS YIPTF	15
SEQ ID NO: 6 FEATURE source SEQUENCE: 6	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNPASGGS YIPTF	15
SEQ ID NO: 7 FEATURE source SEQUENCE: 7	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNRRASGGS YIPTF	15
SEQ ID NO: 8 FEATURE source SEQUENCE: 8	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSLASGGS YIPTF	15
SEQ ID NO: 9 FEATURE source SEQUENCE: 9	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNMASGGS YIPTF	15
SEQ ID NO: 10 FEATURE source SEQUENCE: 10	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVTLASGGS YIPTF	15
SEQ ID NO: 11 FEATURE source SEQUENCE: 11	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNTASGGS YIPTF	15
SEQ ID NO: 12 FEATURE source SEQUENCE: 12	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRLASGGS YIPTF	15
SEQ ID NO: 13 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 13		
CVVRHASGGS YIPTF		15
SEQ ID NO: 14	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 14		
CVVNVASGGS YIPTF		15
SEQ ID NO: 15	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 15		
CVVSHASGGS YIPTF		15
SEQ ID NO: 16	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 16		
CVVVRVASGGS YIPTF		15
SEQ ID NO: 17	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 17		
CVVRSASGGS YIPTF		15
SEQ ID NO: 18	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 18		
CVVIPASGGS YIPTF		15
SEQ ID NO: 19	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 19		
CVVNKASGGS YIPTF		15
SEQ ID NO: 20	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 20		
CVVRGASGGS YIPTF		15
SEQ ID NO: 21	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 21		
CVVTPASGGS YIPTF		15
SEQ ID NO: 22	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 22		

-continued

CVVNAASGGS YIPTF	15
SEQ ID NO: 23 FEATURE source SEQUENCE: 23	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNFAASGGS YIPTF	15
SEQ ID NO: 24 FEATURE source SEQUENCE: 24	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSSASGGS YIPTF	15
SEQ ID NO: 25 FEATURE source SEQUENCE: 25	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNQASGGS YIPTF	15
SEQ ID NO: 26 FEATURE source SEQUENCE: 26	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRTASGGS YIPTF	15
SEQ ID NO: 27 FEATURE source SEQUENCE: 27	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVIHASGGS YIPTF	15
SEQ ID NO: 28 FEATURE source SEQUENCE: 28	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNEASGGS YIPTF	15
SEQ ID NO: 29 FEATURE source SEQUENCE: 29	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNHASGGS YIPTF	15
SEQ ID NO: 30 FEATURE source SEQUENCE: 30	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRRAASGGS YIPTF	15
SEQ ID NO: 31 FEATURE source SEQUENCE: 31	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVILASGGS YIPTF	15
SEQ ID NO: 32 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 32		
CVVRIASGGS YIPTF		15
SEQ ID NO: 33	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 33		
CVVRAASGGS YIPTF		15
SEQ ID NO: 34	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 34		
CVVSPASGGS YIPTF		15
SEQ ID NO: 35	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 35		
CVVSTASGGS YIPTF		15
SEQ ID NO: 36	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 36		
CVVTHASGGS YIPTF		15
SEQ ID NO: 37	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 37		
CVVTSASGGS YIPTF		15
SEQ ID NO: 38	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 38		
CVVTVASGGS YIPTF		15
SEQ ID NO: 39	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 39		
CVVNMAAGGS YIPTF		15
SEQ ID NO: 40	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 40		
CVVSVASGGS YIPTF		15
SEQ ID NO: 41	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 41		

-continued

CVVTAASGGS YIPTF	15
SEQ ID NO: 42 FEATURE source SEQUENCE: 42	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKKGASGGS YIPTF	15
SEQ ID NO: 43 FEATURE source SEQUENCE: 43	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNGAPGGS YIPTF	15
SEQ ID NO: 44 FEATURE source SEQUENCE: 44	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNIAAGGS YIPTF	15
SEQ ID NO: 45 FEATURE source SEQUENCE: 45	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNMATGGS YIPTF	15
SEQ ID NO: 46 FEATURE source SEQUENCE: 46	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVPHASGGS YIPTF	15
SEQ ID NO: 47 FEATURE source SEQUENCE: 47	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSAASGGS YIPTF	15
SEQ ID NO: 48 FEATURE source SEQUENCE: 48	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVTFASGGS YIPTF	15
SEQ ID NO: 49 FEATURE source SEQUENCE: 49	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVREASGGS YIPTF	15
SEQ ID NO: 50 FEATURE source SEQUENCE: 50	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSFASGGS YIPTF	15
SEQ ID NO: 51 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 51		
CVVSGASGGS YIPTF		15
SEQ ID NO: 52	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 52		
CVVSIASGGS YIPTF		15
SEQ ID NO: 53	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 53		
CVVIAASGGS YIPTF		15
SEQ ID NO: 54	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 54		
CVVISASGGS YIPTF		15
SEQ ID NO: 55	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 55		
CVVNMGAGGS YIPTF		15
SEQ ID NO: 56	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 56		
CVVFHASGGS YIPTF		15
SEQ ID NO: 57	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 57		
CVVRQASGGS YIPTF		15
SEQ ID NO: 58	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 58		
CVVSRASGGS YIPTF		15
SEQ ID NO: 59	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 59		
CVVIGASGGS YIPTF		15
SEQ ID NO: 60	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 60		

-continued

CVVLHASGGS YIPTF	15
SEQ ID NO: 61 FEATURE source SEQUENCE: 61	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNIATGGS YIPTF	15
SEQ ID NO: 62 FEATURE source SEQUENCE: 62	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNYASGGS YIPTF	15
SEQ ID NO: 63 FEATURE source SEQUENCE: 63	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRFASGGS YIPTF	15
SEQ ID NO: 64 FEATURE source SEQUENCE: 64	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVTLAGGGS YIPTF	15
SEQ ID NO: 65 FEATURE source SEQUENCE: 65	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVAHASGGS YIPTF	15
SEQ ID NO: 66 FEATURE source SEQUENCE: 66	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVIRASGGS YIPTF	15
SEQ ID NO: 67 FEATURE source SEQUENCE: 67	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNNGAAGGGS YIPTF	15
SEQ ID NO: 68 FEATURE source SEQUENCE: 68	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNIAGGGS YIPTF	15
SEQ ID NO: 69 FEATURE source SEQUENCE: 69	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRMASGGS YIPTF	15
SEQ ID NO: 70 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 70		
CVVTIAGGS YIPTF		15
SEQ ID NO: 71	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 71		
CVVKHASGGS YIPTF		15
SEQ ID NO: 72	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 72		
CVVKSASGGS YIPTF		15
SEQ ID NO: 73	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 73		
CVVMGASGGS YIPTF		15
SEQ ID NO: 74	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 74		
CVVNDASGGS YIPTF		15
SEQ ID NO: 75	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 75		
CVVNRAPGGS YIPTF		15
SEQ ID NO: 76	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 76		
CVVTGASGGS YIPTF		15
SEQ ID NO: 77	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 77		
CVVALASGGS YIPTF		15
SEQ ID NO: 78	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 78		
CVVDHASGGS YIPTF		15
SEQ ID NO: 79	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 79		

-continued

CVVIFASGGS YIPTF	15
SEQ ID NO: 80 FEATURE source SEQUENCE: 80	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVIIASGGS YIPTF	15
SEQ ID NO: 81 FEATURE source SEQUENCE: 81	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVIVASGGS YIPTF	15
SEQ ID NO: 82 FEATURE source SEQUENCE: 82	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVVPASGGS YIPTF	15
SEQ ID NO: 83 FEATURE source SEQUENCE: 83	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKRASGGS YIPTF	15
SEQ ID NO: 84 FEATURE source SEQUENCE: 84	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKTASGGS YIPTF	15
SEQ ID NO: 85 FEATURE source SEQUENCE: 85	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNLAAGGS YIPTF	15
SEQ ID NO: 86 FEATURE source SEQUENCE: 86	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNSAAGGS YIPTF	15
SEQ ID NO: 87 FEATURE source SEQUENCE: 87	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNSAGGGS YIPTF	15
SEQ ID NO: 88 FEATURE source SEQUENCE: 88	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRKASGGS YIPTF	15
SEQ ID NO: 89 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 89		
CVVSQASGGS YIPTF		15
SEQ ID NO: 90	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 90		
CVVFLASGGS YIPTF		15
SEQ ID NO: 91	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 91		
CVVFSASGGS YIPTF		15
SEQ ID NO: 92	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 92		
CVVKAASGGS YIPTF		15
SEQ ID NO: 93	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 93		
CVVKLASGGS YIPTF		15
SEQ ID NO: 94	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 94		
CVVMHASGGS YIPTF		15
SEQ ID NO: 95	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 95		
CVVNLAGGGS YIPTF		15
SEQ ID NO: 96	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 96		
CVVNMAPGGS YIPTF		15
SEQ ID NO: 97	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 97		
CVVNRAAGGS YIPTF		15
SEQ ID NO: 98	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 98		

-continued

CVVN RATGGS YIPTF	15
SEQ ID NO: 99 FEATURE source SEQUENCE: 99	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNVAAGGS YIPTF	15
SEQ ID NO: 100 FEATURE source SEQUENCE: 100	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVN VATGGS YIPTF	15
SEQ ID NO: 101 FEATURE source SEQUENCE: 101	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVN WASGGS YIPTF	15
SEQ ID NO: 102 FEATURE source SEQUENCE: 102	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSKASGGS YIPTF	15
SEQ ID NO: 103 FEATURE source SEQUENCE: 103	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSQAAAGGS YIPTF	15
SEQ ID NO: 104 FEATURE source SEQUENCE: 104	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVTDASGGS YIPTF	15
SEQ ID NO: 105 FEATURE source SEQUENCE: 105	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVTYASGGS YIPTF	15
SEQ ID NO: 106 FEATURE source SEQUENCE: 106	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVGLASGGS YIPTF	15
SEQ ID NO: 107 FEATURE source SEQUENCE: 107	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVGTASGGS YIPTF	15
SEQ ID NO: 108 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 108		
CVVIDASGGS YIPTF		15
SEQ ID NO: 109	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 109		
CVVITASGGS YIPTF		15
SEQ ID NO: 110	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 110		
CVVKVASGGS YIPTF		15
SEQ ID NO: 111	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 111		
CVVLLASGGS YIPTF		15
SEQ ID NO: 112	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 112		
CVVNGATGGS YIPTF		15
SEQ ID NO: 113	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 113		
CVVNIAPGGS YIPTF		15
SEQ ID NO: 114	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 114		
CVVNKAAGGS YIPTF		15
SEQ ID NO: 115	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 115		
CVVNLARGGS YIPTF		15
SEQ ID NO: 116	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 116		
CVVNSAVGGS YIPTF		15
SEQ ID NO: 117	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 117		

-continued

CVVNTAGGGS YIPTF	15
SEQ ID NO: 118 FEATURE source	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
SEQUENCE: 118 CVVNVAGGGS YIPTF	15
SEQ ID NO: 119 FEATURE source	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
SEQUENCE: 119 CVVTQASGGS YIPTF	15
SEQ ID NO: 120 FEATURE source	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
SEQUENCE: 120 CVVTTASGGS YIPTF	15
SEQ ID NO: 121 FEATURE source	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
SEQUENCE: 121 CVVYHASGGS YIPTF	15
SEQ ID NO: 122 FEATURE source	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
SEQUENCE: 122 CVVYLASGGS YIPTF	15
SEQ ID NO: 123 FEATURE source	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
SEQUENCE: 123 CVVADASGGS YIPTF	15
SEQ ID NO: 124 FEATURE source	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
SEQUENCE: 124 CVVAQASGGS YIPTF	15
SEQ ID NO: 125 FEATURE source	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
SEQUENCE: 125 CVVASASGGS YIPTF	15
SEQ ID NO: 126 FEATURE source	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
SEQUENCE: 126 CVVATASGGS YIPTF	15
SEQ ID NO: 127 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 127		
CVVFGASGGS YIPTF		15
SEQ ID NO: 128	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 128		
CVVHHASGGS YIPTF		15
SEQ ID NO: 129	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 129		
CVVHVASGGS YIPTF		15
SEQ ID NO: 130	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 130		
CVVINASGGS YIPTF		15
SEQ ID NO: 131	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 131		
CVVIQASGGS YIPTF		15
SEQ ID NO: 132	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 132		
CVVKEASGGS YIPTF		15
SEQ ID NO: 133	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 133		
CVVKIASGGS YIPTF		15
SEQ ID NO: 134	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 134		
CVVKKASGGS YIPTF		15
SEQ ID NO: 135	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 135		
CVVKMASGGS YIPTF		15
SEQ ID NO: 136	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 136		

-continued

CVVKRAGGGS YIPTF	15
SEQ ID NO: 137 FEATURE source SEQUENCE: 137	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVLGASGGS YIPTF	15
SEQ ID NO: 138 FEATURE source SEQUENCE: 138	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVLPASGGS YIPTF	15
SEQ ID NO: 139 FEATURE source SEQUENCE: 139	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVLSASGGS YIPTF	15
SEQ ID NO: 140 FEATURE source SEQUENCE: 140	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVLTASGGS YIPTF	15
SEQ ID NO: 141 FEATURE source SEQUENCE: 141	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVMPASGGS YIPTF	15
SEQ ID NO: 142 FEATURE source SEQUENCE: 142	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNEAAGGS YIPTF	15
SEQ ID NO: 143 FEATURE source SEQUENCE: 143	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNIALGGGS YIPTF	15
SEQ ID NO: 144 FEATURE source SEQUENCE: 144	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNIARGGS YIPTF	15
SEQ ID NO: 145 FEATURE source SEQUENCE: 145	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNMAEGGS YIPTF	15
SEQ ID NO: 146 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 146		
CVVNPATGGS YIPTF		15
SEQ ID NO: 147	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 147		
CVVNSATGGS YIPTF		15
SEQ ID NO: 148	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 148		
CVVPFASGGS YIPTF		15
SEQ ID NO: 149	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 149		
CVVPPASGGS YIPTF		15
SEQ ID NO: 150	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 150		
CVVPRASGGS YIPTF		15
SEQ ID NO: 151	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 151		
CVVPSASGGS YIPTF		15
SEQ ID NO: 152	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 152		
CVVPTASGGS YIPTF		15
SEQ ID NO: 153	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 153		
CVVRLAGGGS YIPTF		15
SEQ ID NO: 154	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 154		
CVVRPASGGS YIPTF		15
SEQ ID NO: 155	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 155		

-continued

CVVRTARGGS YIPTF	15
SEQ ID NO: 156 FEATURE source SEQUENCE: 156	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRVAAGGS YIPTF	15
SEQ ID NO: 157 FEATURE source SEQUENCE: 157	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRYASGGGS YIPTF	15
SEQ ID NO: 158 FEATURE source SEQUENCE: 158	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSDASGGF YIPTF	15
SEQ ID NO: 159 FEATURE source SEQUENCE: 159	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSGAVGGS YIPTF	15
SEQ ID NO: 160 FEATURE source SEQUENCE: 160	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSLAGGGF YIPTF	15
SEQ ID NO: 161 FEATURE source SEQUENCE: 161	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVWHASGGF YIPTF	15
SEQ ID NO: 162 FEATURE source SEQUENCE: 162	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVVLASGGF YIPTF	15
SEQ ID NO: 163 FEATURE source SEQUENCE: 163	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVAFASGGF YIPTF	15
SEQ ID NO: 164 FEATURE source SEQUENCE: 164	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVAGASGGF YIPTF	15
SEQ ID NO: 165 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 165		
CVVAPASGGS YIPTF		15
SEQ ID NO: 166	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 166		
CVVAVASGGS YIPTF		15
SEQ ID NO: 167	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 167		
CVVAWASGGS YIPTF		15
SEQ ID NO: 168	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 168		
CVVDDASGGS YIPTF		15
SEQ ID NO: 169	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 169		
CVVDQASGGS YIPTF		15
SEQ ID NO: 170	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 170		
CVVEQASGGS YIPTF		15
SEQ ID NO: 171	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 171		
CVVFAASGGS YIPTF		15
SEQ ID NO: 172	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 172		
CVVFLAGGGS YIPTF		15
SEQ ID NO: 173	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 173		
CVVFQARGGS YIPTF		15
SEQ ID NO: 174	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 174		

-continued

CVVFQASGGS YIPTF	15
SEQ ID NO: 175 FEATURE source SEQUENCE: 175	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVFRASGGS YIPTF	15
SEQ ID NO: 176 FEATURE source SEQUENCE: 176	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVFTASGGS YIPTF	15
SEQ ID NO: 177 FEATURE source SEQUENCE: 177	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVFVASGGS YIPTF	15
SEQ ID NO: 178 FEATURE source SEQUENCE: 178	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVGDASGGS YIPTF	15
SEQ ID NO: 179 FEATURE source SEQUENCE: 179	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVGIASGGS YIPTF	15
SEQ ID NO: 180 FEATURE source SEQUENCE: 180	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVGRASGGS YIPTF	15
SEQ ID NO: 181 FEATURE source SEQUENCE: 181	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVGVAAGGS YIPTF	15
SEQ ID NO: 182 FEATURE source SEQUENCE: 182	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVGVASGGS YIPTF	15
SEQ ID NO: 183 FEATURE source SEQUENCE: 183	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVHDASGGS YIPTF	15
SEQ ID NO: 184 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 184		
CVVHEASGGS YIPTF		15
SEQ ID NO: 185	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 185		
CVVHLASGGS YIPTF		15
SEQ ID NO: 186	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 186		
CVVHQASGGS YIPTF		15
SEQ ID NO: 187	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 187		
CVVHYASGGS YIPTF		15
SEQ ID NO: 188	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 188		
CVVIPATGGS YIPTF		15
SEQ ID NO: 189	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 189		
CVVISAPGGS YIPTF		15
SEQ ID NO: 190	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 190		
CVVIYASGGS YIPTF		15
SEQ ID NO: 191	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 191		
CVVKAAAGGS YIPTF		15
SEQ ID NO: 192	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 192		
CVVKDASGGS YIPTF		15
SEQ ID NO: 193	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 193		

-continued

CVVKFASGGS YIPTF	15
SEQ ID NO: 194 FEATURE source SEQUENCE: 194	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKGAGGGS YIPTF	15
SEQ ID NO: 195 FEATURE source SEQUENCE: 195	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKGAPGGS YIPTF	15
SEQ ID NO: 196 FEATURE source SEQUENCE: 196	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKLAVGGS YIPTF	15
SEQ ID NO: 197 FEATURE source SEQUENCE: 197	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKNASGGS YIPTF	15
SEQ ID NO: 198 FEATURE source SEQUENCE: 198	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKSAGGGS YIPTF	15
SEQ ID NO: 199 FEATURE source SEQUENCE: 199	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKTAAGGS YIPTF	15
SEQ ID NO: 200 FEATURE source SEQUENCE: 200	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKTAGGGS YIPTF	15
SEQ ID NO: 201 FEATURE source SEQUENCE: 201	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKVAGGGS YIPTF	15
SEQ ID NO: 202 FEATURE source SEQUENCE: 202	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVKYASGGS YIPTF	15
SEQ ID NO: 203 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 203		
CVVLGAAGGS YIPTF		15
SEQ ID NO: 204	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 204		
CVVLLVASGGS YIPTF		15
SEQ ID NO: 205	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 205		
CVVMAASGGS YIPTF		15
SEQ ID NO: 206	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 206		
CVVMKAEGGS YIPTF		15
SEQ ID NO: 207	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 207		
CVVMLASGGS YIPTF		15
SEQ ID NO: 208	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 208		
CVVMRASGGS YIPTF		15
SEQ ID NO: 209	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 209		
CVVMTASGGS YIPTF		15
SEQ ID NO: 210	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 210		
CVVNAAAGGS YIPTF		15
SEQ ID NO: 211	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 211		
CVVNAAPGGS YIPTF		15
SEQ ID NO: 212	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 212		

-continued

CVVNAARGGS YIPTF	15
SEQ ID NO: 213 FEATURE source SEQUENCE: 213	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNAATGGS YIPTF	15
SEQ ID NO: 214 FEATURE source SEQUENCE: 214	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNEAGGGS YIPTF	15
SEQ ID NO: 215 FEATURE source SEQUENCE: 215	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNEATGGS YIPTF	15
SEQ ID NO: 216 FEATURE source SEQUENCE: 216	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNGAGGGS YIPTF	15
SEQ ID NO: 217 FEATURE source SEQUENCE: 217	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNGAQGGS YIPTF	15
SEQ ID NO: 218 FEATURE source SEQUENCE: 218	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNGARGGS YIPTF	15
SEQ ID NO: 219 FEATURE source SEQUENCE: 219	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNGAVGGS YIPTF	15
SEQ ID NO: 220 FEATURE source SEQUENCE: 220	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNIAEGGS YIPTF	15
SEQ ID NO: 221 FEATURE source SEQUENCE: 221	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNIAIGGS YIPTF	15
SEQ ID NO: 222 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 222		
CVVNKAKGGS YIPTF		15
SEQ ID NO: 223	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 223		
CVVNKAPGGS YIPTF		15
SEQ ID NO: 224	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 224		
CVVNKATGGS YIPTF		15
SEQ ID NO: 225	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 225		
CVVNLAVGGS YIPTF		15
SEQ ID NO: 226	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 226		
CVVNMALGGS YIPTF		15
SEQ ID NO: 227	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 227		
CVVNMAQGGS YIPTF		15
SEQ ID NO: 228	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 228		
CVVNMRGGS YIPTF		15
SEQ ID NO: 229	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 229		
CVVNNAPGGS YIPTF		15
SEQ ID NO: 230	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 230		
CVVNNARGGS YIPTF		15
SEQ ID NO: 231	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 231		

-continued

CVVNNASGGS YIPTF	15
SEQ ID NO: 232 FEATURE source SEQUENCE: 232	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNPALGGS YIPTF	15
SEQ ID NO: 233 FEATURE source SEQUENCE: 233	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNPAPGGS YIPTF	15
SEQ ID NO: 234 FEATURE source SEQUENCE: 234	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNQAAAGGS YIPTF	15
SEQ ID NO: 235 FEATURE source SEQUENCE: 235	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNQATGGS YIPTF	15
SEQ ID NO: 236 FEATURE source SEQUENCE: 236	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNRAAGGS YIPTF	15
SEQ ID NO: 237 FEATURE source SEQUENCE: 237	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNSAEGGS YIPTF	15
SEQ ID NO: 238 FEATURE source SEQUENCE: 238	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNSAKGGF YIPTF	15
SEQ ID NO: 239 FEATURE source SEQUENCE: 239	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNTAAAGGS YIPTF	15
SEQ ID NO: 240 FEATURE source SEQUENCE: 240	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVNTAKGGF YIPTF	15
SEQ ID NO: 241 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 241		
CVVNTAPGGS YIPTF		15
SEQ ID NO: 242	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 242		
CVVNTARGGS YIPTF		15
SEQ ID NO: 243	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 243		
CVVNVAAPGGS YIPTF		15
SEQ ID NO: 244	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 244		
CVVNWAAGGS YIPTF		15
SEQ ID NO: 245	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 245		
CVVNWAGGGS YIPTF		15
SEQ ID NO: 246	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 246		
CVVPEASGGS YIPTF		15
SEQ ID NO: 247	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 247		
CVVPGASGGS YIPTF		15
SEQ ID NO: 248	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 248		
CVVPLASGGS YIPTF		15
SEQ ID NO: 249	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 249		
CVVPLATGGS YIPTF		15
SEQ ID NO: 250	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 250		

-continued

CVVPPAPGGS YIPTF	15
SEQ ID NO: 251 FEATURE source SEQUENCE: 251	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVPVASGGS YIPTF	15
SEQ ID NO: 252 FEATURE source SEQUENCE: 252	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVQGASGGS YIPTF	15
SEQ ID NO: 253 FEATURE source SEQUENCE: 253	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVQHASGGS YIPTF	15
SEQ ID NO: 254 FEATURE source SEQUENCE: 254	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVQLASGGS YIPTF	15
SEQ ID NO: 255 FEATURE source SEQUENCE: 255	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVQSASGGS YIPTF	15
SEQ ID NO: 256 FEATURE source SEQUENCE: 256	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRDASGGS YIPTF	15
SEQ ID NO: 257 FEATURE source SEQUENCE: 257	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVREAWGGS YIPTF	15
SEQ ID NO: 258 FEATURE source SEQUENCE: 258	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRFARGGS YIPTF	15
SEQ ID NO: 259 FEATURE source SEQUENCE: 259	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVRGAEGGS YIPTF	15
SEQ ID NO: 260 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 260		
CVVRHATGGS YIPTF		15
SEQ ID NO: 261	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 261		
CVVRQAGGGS YIPTF		15
SEQ ID NO: 262	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 262		
CVVRRAAGGS YIPTF		15
SEQ ID NO: 263	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 263		
CVVRSATGGS YIPTF		15
SEQ ID NO: 264	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 264		
CVVRTAQGGS YIPTF		15
SEQ ID NO: 265	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 265		
CVVRVAGGGS YIPTF		15
SEQ ID NO: 266	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 266		
CVVSEASGGS YIPTF		15
SEQ ID NO: 267	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 267		
CVVSGAQGGS YIPTF		15
SEQ ID NO: 268	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 268		
CVVSLAAGGS YIPTF		15
SEQ ID NO: 269	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 269		

-continued

CVVSLAKGGS YIPTF	15
SEQ ID NO: 270 FEATURE source SEQUENCE: 270	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSMASGGS YIPTF	15
SEQ ID NO: 271 FEATURE source SEQUENCE: 271	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSPAPGGS YIPTF	15
SEQ ID NO: 272 FEATURE source SEQUENCE: 272	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSQAGGGS YIPTF	15
SEQ ID NO: 273 FEATURE source SEQUENCE: 273	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSRAMGGS YIPTF	15
SEQ ID NO: 274 FEATURE source SEQUENCE: 274	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSSAVGGS YIPTF	15
SEQ ID NO: 275 FEATURE source SEQUENCE: 275	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVSTATGGS YIPTF	15
SEQ ID NO: 276 FEATURE source SEQUENCE: 276	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVTEASGGS YIPTF	15
SEQ ID NO: 277 FEATURE source SEQUENCE: 277	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVTGAAGGS YIPTF	15
SEQ ID NO: 278 FEATURE source SEQUENCE: 278	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVTIAEGGS YIPTF	15
SEQ ID NO: 279 FEATURE	moltype = AA length = 15 Location/Qualifiers

-continued

source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 279		
CVVTNAPGGS YIPTF		15
SEQ ID NO: 280	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 280		
CVVTPAPGGS YIPTF		15
SEQ ID NO: 281	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 281		
CVVTRASGGS YIPTF		15
SEQ ID NO: 282	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 282		
CVVTSARGGS YIPTF		15
SEQ ID NO: 283	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 283		
CVVTSATGGS YIPTF		15
SEQ ID NO: 284	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 284		
CVVTTAGGGS YIPTF		15
SEQ ID NO: 285	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 285		
CVVVFASGGS YIPTF		15
SEQ ID NO: 286	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 286		
CVVVGASGGF YIPTF		15
SEQ ID NO: 287	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 287		
CVVVMASGGF YIPTF		15
SEQ ID NO: 288	moltype = AA length = 15	
FEATURE	Location/Qualifiers	
source	1..15	
	mol_type = protein	
	organism = Homo sapiens	
SEQUENCE: 288		

-continued

CVVVRASGGS YIPTF	15
SEQ ID NO: 289 FEATURE source SEQUENCE: 289	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVGASGGS YIPTF	15
SEQ ID NO: 290 FEATURE source SEQUENCE: 290	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVWPASGGS YIPTF	15
SEQ ID NO: 291 FEATURE source SEQUENCE: 291	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVWTASGGS YIPTF	15
SEQ ID NO: 292 FEATURE source SEQUENCE: 292	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVYFASGGS YIPTF	15
SEQ ID NO: 293 FEATURE source SEQUENCE: 293	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVYGASGGS YIPTF	15
SEQ ID NO: 294 FEATURE source SEQUENCE: 294	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVYMAPGGS YIPTF	15
SEQ ID NO: 295 FEATURE source SEQUENCE: 295	moltype = AA length = 15 Location/Qualifiers 1..15 mol_type = protein organism = Homo sapiens
CVVYPASGGS YIPTF	15
SEQ ID NO: 296 FEATURE source SEQUENCE: 296	moltype = DNA length = 45 Location/Qualifiers 1..45 mol_type = genomic DNA organism = Homo sapiens
tgtgtggtga acattgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 297 FEATURE source SEQUENCE: 297	moltype = DNA length = 45 Location/Qualifiers 1..45 mol_type = genomic DNA organism = Homo sapiens
tgtgtggtga acttggcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 298 FEATURE	moltype = DNA length = 45 Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 298
tgtgtggtga acaaggcgcc agggaggaagc tacataccta cattt      45

SEQ ID NO: 299      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 299
tgtgtggtcc gaattgcattc agggaggaagc tacataccta cattt      45

SEQ ID NO: 300      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 300
tgtgtggtga ttcatgcattc agggaggaagc tacataccta cattt      45

SEQ ID NO: 301      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 301
tgtgtggtga ggggagcattc agggaggaagc tacataccta cattt      45

SEQ ID NO: 302      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 302
tgtgtggtga gaaaggcgcc agggaggaagc tacataccta cattt      45

SEQ ID NO: 303      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 303
tgtgtggtga acttcgcattc agggaggaagc tacataccta cattt      45

SEQ ID NO: 304      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 304
tgtgtggtga accttcgcattc agggaggaagc tacataccta cattt      45

SEQ ID NO: 305      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 305
tgtgtggtga accttcgcattc agggaggaagc tacataccta cattt      45

SEQ ID NO: 306      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 306
tgtgtggtga acacggcattc agggaggaagc tacataccta cattt      45

SEQ ID NO: 307      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 307

```

-continued

tgtgtggta acagagcccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 308	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 308	
tgtgtggta ggggtggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 309	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 309	
tgtgtggtcc gtttcgcacatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 310	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 310	
tgtgtggta ccgttagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 311	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 311	
tgtgtggta acgcccgcacatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 312	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 312	
tgtgtggta acatcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 313	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 313	
tgtgtggta acggcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 314	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 314	
tgtgtggta gccttgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 315	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 315	
tgtgtggtcc gttttgcacatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 316	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 316	
tgtgtggta ggtttgcacatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 317	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 317
tgtgtggtgc gttcgccatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 318      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 318
tgtgtggtga gcttagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 319      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 319
tgtgtggta aacttgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 320      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 320
tgtgtggtga actttgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 321      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 321
tgtgtggtga ggctcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 322      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 322
tgtgtggtga gggtcgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 323      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 323
tgtgtggtga ggcatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 324      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 324
tgtgtggtga ggaccgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 325      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 325
tgtgtggtga gagccgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 326      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 326

```

-continued

tgtgtggta acaccgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 327	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 327	
tgtgtggtcc gacgggcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 328	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 328	
tgtgtggta cttagcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 329	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 329	
tgtgtggta cggtcgatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 330	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 330	
tgtgtggta gcgtggatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 331	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 331	
tgtgtggta ggggggatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 332	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 332	
tgtgtggta ggacggatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 333	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 333	
tgtgtggta actctgatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 334	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 334	
tgtgtggta actcggtgg aggaggaagc tacataccta cattt	45
SEQ ID NO: 335	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 335	
tgtgtggta accttgccatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 336	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 336
tgtgtggta acatggcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 337      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 337
tgtgtggta acagggcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 338      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 338
tgtgtggta acacagcgcc agaggaaagc tacataccta cattt      45

SEQ ID NO: 339      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 339
tgtgtggta atcttgcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 340      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 340
tgtgtggta ccgtcgcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 341      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 341
tgtgtggta ggagcgccac aggaggaagc tacataccta cattt      45

SEQ ID NO: 342      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 342
tgtgtggta acgttagcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 343      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 343
tgtgtggta acatagcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 344      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 344
tgtgtggtcc gccaggcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 345      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 345

```

-continued

tgtgtggta ccttgcatac aggaggaago tacataccta cattt	45
SEQ ID NO: 346	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 346	
tgtgtggta gcctggcaaa gggaggaago tacataccta cattt	45
SEQ ID NO: 347	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 347	
tgtgtggta gcacccgcttc aggaggaago tacataccta cattt	45
SEQ ID NO: 348	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 348	
tgtgtggta ggcgtgcatac aggaggaago tacataccta cattt	45
SEQ ID NO: 349	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 349	
tgtgtggta ggagtgcatac aggaggaago tacataccta cattt	45
SEQ ID NO: 350	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 350	
tgtgtggta acctggcgaaa gggaggaago tacataccta cattt	45
SEQ ID NO: 351	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 351	
tgtgtggta acggcgccgc aggaggaago tacataccta cattt	45
SEQ ID NO: 352	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 352	
tgtgtggta accggggcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 353	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 353	
tgtgtggta acatggcgaaa aggaggaago tacataccta cattt	45
SEQ ID NO: 354	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 354	
tgtgtggta ccctggcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 355	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 355
tgtgtggtcc gagttgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 356      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 356
tgtgtggtga ccaccgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 357      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 357
tgtgtggtga gtttcgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 358      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 358
tgtgtggtgg ggcttagcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 359      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 359
tgtgtggtgg ggatagcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 360      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 360
tgtgtggtga atctcgcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 361      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 361
tgtgtggtga acctggcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 362      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 362
tgtgtggtga acagtgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 363      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 363
tgtgtggtac ggtcgccattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 364      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 364

```

-continued

tgtgtggct cgtctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 365	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 365	
tgtgtgggtgc gtctggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 366	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 366	
tgtgtgggtgc gtacccgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 367	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 367	
tgtgtgggtga cggtcgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 368	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 368	
tgtgtgggtga ggccgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 369	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 369	
tgtgtgggtga ggcttagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 370	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 370	
tgtgtgggtga acatggcgac aggaggaagc tacataccta cattt	45
SEQ ID NO: 371	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 371	
tgtgtgggtgt ccgaggcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 372	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 372	
tgtgtgggtgt cgatcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 373	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 373	
tgtgtgggtga ctctcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 374	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 374
tgtgtggtga cccttgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 375      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 375
tgtgtggtga ccctggcgccc gggaggaagc tacataccta cattt          45

SEQ ID NO: 376      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 376
tgtgtggtga cgcttagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 377      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 377
tgtgtggtga gcccacatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 378      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 378
tgtgtggtga ggtagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 379      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 379
tgtgtggtga ggctggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 380      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 380
tgtgtggtga gggttgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 381      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 381
tgtgtggtga ggatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 382      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 382
tgtgtggtga gacatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 383      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 383

```

-continued

tgtgtggta atgttgcata aggaggaago tacataccta cattt	45
SEQ ID NO: 384	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 384	
tgtgtggta actctgcccgc aggaggaago tacataccta cattt	45
SEQ ID NO: 385	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 385	
tgtgtggta acgttgcata aggaggaago tacataccta cattt	45
SEQ ID NO: 386	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 386	
tgtgtggta aaacggcgagg aggaggaago tacataccta cattt	45
SEQ ID NO: 387	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 387	
tgtgtgggt accatgcata aggaggaago tacataccta cattt	45
SEQ ID NO: 388	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 388	
tgtgtggta acggggcata aggaggaago tacataccta cattt	45
SEQ ID NO: 389	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 389	
tgtgtggta ggcttgcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 390	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 390	
tgtgtggta ccccaagcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 391	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 391	
tgtgtggta acatagcagg aggaggaago tacataccta cattt	45
SEQ ID NO: 392	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 392	
tgtgtggta accatgcata aggaggaago tacataccta cattt	45
SEQ ID NO: 393	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 393
tgtgtggta aatcgccggg gggaggaagc tacataccta cattt           45

SEQ ID NO: 394      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 394
tgtgtggta atcttagcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 395      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 395
tgtgtggta aaagcgcatac aggaggaagc tacataccta cattt           45

SEQ ID NO: 396      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 396
tgtgtggta acggggcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 397      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 397
tgtgtggtgt cgttcgatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 398      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 398
tgtgtggta actccgcatac aggaggaagc tacataccta cattt           45

SEQ ID NO: 399      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 399
tgtgtggtaa ggcatgcatac aggaggaagc tacataccta cattt           45

SEQ ID NO: 400      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 400
tgtgtggtaa gggccgcatac aggaggaagc tacataccta cattt           45

SEQ ID NO: 401      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 401
tgtgtggta ccctcgatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 402      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 402

```

-continued

tgtgtggta gactagcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 403	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 403	
tgtgtggta acggggcgtc aggaggaago tacataccta cattt	45
SEQ ID NO: 404	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 404	
tgtgtggta acatggcgcc aggaggaago tacataccta cattt	45
SEQ ID NO: 405	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 405	
tgtgtggta accaggcgcc aggaggaago tacataccta cattt	45
SEQ ID NO: 406	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 406	
tgtgtggta cccgtgcattc aggaggaago tacataccta cattt	45
SEQ ID NO: 407	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 407	
tgtgtggta acatagcaac aggaggaago tacataccta cattt	45
SEQ ID NO: 408	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 408	
tgtgtggta gacatgcattc aggaggaago tacataccta cattt	45
SEQ ID NO: 409	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 409	
tgtgtggta gccttagcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 410	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 410	
tgtgtggta gagcggcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 411	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 411	
tgtgtggta accttagcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 412	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 412
tgtgtggta acgtcgcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 413      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 413
tgtgtggta gcctcgcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 414      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 414
tgtgtggta atacggccgg gggaggaagc tacataccta cattt           45

SEQ ID NO: 415      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 415
tgtgtggta acatcgccgc aggaggaagc tacataccta cattt           45

SEQ ID NO: 416      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 416
tgtgtggtcc ttacggcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 417      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 417
tgtgtggtgt cccatcgcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 418      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 418
tgtgtggtgc tatccgcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 419      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 419
tgtgtggta cccttagcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 420      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 420
tgtgtggta gtcttgcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 421      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 421

```

-continued

tgtgtggta gtggggccgt gggaggaagt tacataccta cattt	45
SEQ ID NO: 422	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 422	
tgtgtggta gtggggccgt gggaggaagc tacataccta cattt	45
SEQ ID NO: 423	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 423	
tgtgtggta gccatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 424	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 424	
tgtgtggta attcagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 425	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 425	
tgtgtggta acatcgccgg gggaggaagc tacataccta cattt	45
SEQ ID NO: 426	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 426	
tgtgtggta acatggcttc aggaggaagc tacataccta cattt	45
SEQ ID NO: 427	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 427	
tgtgtggta acatggcaggc aggaggaagc tacataccta cattt	45
SEQ ID NO: 428	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 428	
tgtgtggta cctctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 429	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 429	
tgtgtggta acttagccag aggaggaagc tacataccta cattt	45
SEQ ID NO: 430	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 430	
tgtgtggta accccgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 431	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 431
tgtgtggta acattgcctc aggaggaagc tacataccta cattt           45

SEQ ID NO: 432      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 432
tgtgtggta actcagcttc aggaggaagc tacataccta cattt           45

SEQ ID NO: 433      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 433
tgtgtggta gccaaggcttc aggaggaagc tacataccta cattt           45

SEQ ID NO: 434      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 434
tgtgtggta acgaggccatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 435      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 435
tgtgtggta gtcatgcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 436      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 436
tgtgtggta gcacggcaac aggaggaagc tacataccta cattt           45

SEQ ID NO: 437      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 437
tgtgtggta acagcgcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 438      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 438
tgtgtggta acagagcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 439      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 439
tgtgtggtgt atcatgcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 440      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 440

```

-continued

tgtgtggta tccaaagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 441	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 441	
tgtgtggta tcgatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 442	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 442	
tgtgtggta acccagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 443	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 443	
tgtgtggta acgaagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 444	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 444	
tgtgtggta acatggcgct cggaggaagc tacataccta cattt	45
SEQ ID NO: 445	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 445	
tgtgtggta tcccgccatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 446	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 446	
tgtgtggta cccctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 447	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 447	
tgtgtggtgc cccgagcctc aggaggaagc tacataccta cattt	45
SEQ ID NO: 448	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 448	
tgtgtggttt ctcatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 449	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 449	
tgtgtggtgt ccccgccccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 450	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 450
tgtgtggta acgacgcatac agggagaagc tacataccta cattt          45

SEQ ID NO: 451      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 451
tgtgtggta ggaaagcatc agggagaagc tacataccta cattt          45

SEQ ID NO: 452      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 452
tgtgtggta acactgcatac agggagaagc tacataccta cattt          45

SEQ ID NO: 453      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 453
tgtgtggtcc gacatgcatac agggagaagc tacataccta cattt          45

SEQ ID NO: 454      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 454
tgtgtggta ccccccgcatac agggagaagc tacataccta cattt          45

SEQ ID NO: 455      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 455
tgtgtggta gtattgcatac agggagaagc tacataccta cattt          45

SEQ ID NO: 456      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 456
tgtgtggta gcgttgcatac agggagaagc tacataccta cattt          45

SEQ ID NO: 457      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 457
tgtgtggta acgcggcgac agggagaagc tacataccta cattt          45

SEQ ID NO: 458      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 458
tgtgtggta acactgcccc agggagaagc tacataccta cattt          45

SEQ ID NO: 459      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 459

```

-continued

tgtgtggta agaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 460	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 460	
tgtgtggttc atcatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 461	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 461	
tgtgtggta gggaaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 462	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 462	
tgtgtggta tccctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 463	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 463	
tgtgtggttg tgatggcattc cggaggaagc tacataccta cattt	45
SEQ ID NO: 464	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 464	
tgtgtggta acgctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 465	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 465	
tgtgtggta accctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 466	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 466	
tgtgtggta acaaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 467	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 467	
tgtgtggta acatggcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 468	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 468	
tgtgtggta acatcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 469	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 469
tgtgtggta acgttagcaac aggaggaagc tacataccta cattt          45

SEQ ID NO: 470      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 470
tgtgtggtc accaggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 471      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 471
tgtgtggta acctggctgg gggaggaagc tacataccta cattt          45

SEQ ID NO: 472      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 472
tgtgtggttc gacatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 473      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 473
tgtgtggta accgtgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 474      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 474
tgtgtggtcc accatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 475      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 475
tgtgtggta gaactgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 476      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 476
tgtgtggta actcgccattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 477      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 477
tgtgtggttc gtcttgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 478      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 478

```

-continued

tgtgtggta gccatgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 479	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 479		
tgtgtggtgt cacatgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 480	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 480		
tgtgtggtgc tcacccgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 481	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 481		
tgtgtggtgc cccatgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 482	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 482		
tgtgtggtga tcgcggcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 483	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 483		
tgtgtggtga gggtagcgcc	aggaggaago tacataccta cattt	45
SEQ ID NO: 484	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 484		
tgtgtggtga gagaggcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 485	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 485		
tgtgtggtga aatccgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 486	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 486		
tgtgtggtga attctgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 487	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 487		
tgtgtggtga accccggcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 488	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 488
tgtgtggtgc ttagcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 489      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 489
tgtgtggtga ggcgcgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 490      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 490
tgtgtggtga acatagctgc aggaggaagc tacataccta cattt          45

SEQ ID NO: 491      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 491
tgtgtggtgg gggtcgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 492      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 492
tgtgtggtga gcacccgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 493      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 493
tgtgtggtgc gtcatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 494      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 494
tgtgtggtga ccattgcggg aaggaggaagc tacataccta cattt          45

SEQ ID NO: 495      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 495
tgtgtggtga ggcgcgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 496      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 496
tgtgtggtga ggattgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 497      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 497

```

-continued

tgtgtggta accgggcaac aggaggaagc tacataccta cattt	45
SEQ ID NO: 498	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 498	
tgtgtggta acgaggcgcc aggaggaagc tacataccta cattt	45
SEQ ID NO: 499	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 499	
tgtgtggta acatagcgcc aggaggaagc tacataccta cattt	45
SEQ ID NO: 500	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 500	
tgtgtggta acacggctaa aggaggaagc tacataccta cattt	45
SEQ ID NO: 501	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 501	
tgtgtggta gtgcggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 502	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 502	
tgtgtggttc gtcatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 503	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 503	
tgtgtggtgt cttttgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 504	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 504	
tgtgtggta ccattgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 505	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 505	
tgtgtggta gggggcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 506	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 506	
tgtgtggta acgtcgcgtc aggaggaagc tacataccta cattt	45
SEQ ID NO: 507	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 507
tgtgtggta agggagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 508      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 508
tgtgtggta acggcgccaggcaggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 509      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 509
tgtgtggtgt tccgagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 510      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 510
tgtgtggtgt ctcttgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 511      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 511
tgtgtggta cgctcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 512      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 512
tgtgtggta acatagcagc aggaggaagc tacataccta cattt          45

SEQ ID NO: 513      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 513
tgtgtggtct ctatagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 514      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 514
tgtgtggtgt tccatgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 515      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 515
tgtgtggta agagggctgg aggaggaagc tacataccta cattt          45

SEQ ID NO: 516      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 516

```

-continued

tgtgtggta gccgcgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 517	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 517		
tgtgtggta acatcgac	aggaggaago tacataccta cattt	45
SEQ ID NO: 518	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 518		
tgtgtggta tccccgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 519	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 519		
tgtgtggta actcagcatc	aggaggaago tacataccta cattt	45
SEQ ID NO: 520	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 520		
tgtgtggta actacgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 521	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 521		
tgtgtggta acggggcgac	aggaggaago tacataccta cattt	45
SEQ ID NO: 522	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 522		
tgtgtggta acaaggcatc	aggaggaago tacataccta cattt	45
SEQ ID NO: 523	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 523		
tgtgtggta agcatgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 524	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 524		
tgtgtggta aacccgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 525	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 525		
tgtgtggta ttccgcac	aggaggaago tacataccta cattt	45
SEQ ID NO: 526	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 526
tgtgtggtga tccgtgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 527      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 527
tgtgtggtga ccgctgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 528      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 528
tgtgtggtga aaggggcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 529      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 529
tgtgtggtct tccttgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 530      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 530
tgtgtggtga accaaggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 531      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 531
tgtgtggtga acatttgcac aggaggaagc tacataccta cattt          45

SEQ ID NO: 532      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 532
tgtgtggtgtt ccttagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 533      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 533
tgtgtggtgc ggcttgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 534      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 534
tgtgtggtcc gccccgcgtc aggaggaagc tacataccta cattt          45

SEQ ID NO: 535      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 535

```

-continued

tgtgtggta gtgttgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 536	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 536	
tgtgtggtgt tttccgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 537	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 537	
tgtgtggta ccccgccacc aggaggaagc tacataccta cattt	45
SEQ ID NO: 538	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 538	
tgtgtggta gtaccgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 539	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 539	
tgtgtggta ttccagcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 540	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 540	
tgtgtggta atcatgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 541	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 541	
tgtgtggta accaggcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 542	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 542	
tgtgtggta acgcggcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 543	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 543	
tgtgtggta acggagcgta aggaggaagc tacataccta cattt	45
SEQ ID NO: 544	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 544	
tgtgtggta agttggcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 545	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 545
tgtgtggtgg ctactgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 546      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 546
tgtgtggtga tgcccgcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 547      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 547
tgtgtggtct ccttagcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 548      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 548
tgtgtggtga gggaggcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 549      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 549
tgtgtggtga acattgcagg gggaggaagc tacataccta cattt      45

SEQ ID NO: 550      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 550
tgtgtggtgc gcctcgcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 551      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 551
tgtgtggtgc gcacccgcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 552      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 552
tgtgtggtga gcattgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 553      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 553
tgtgtggtga gacgagcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 554      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 554

```

-continued

tgtgtggttt ctatcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 555	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 555	
tgtgtggta agaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 556	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 556	
tgtgtggta gggtggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 557	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 557	
tgtgtggta gcttggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 558	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 558	
tgtgtggta gagaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 559	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 559	
tgtgtggta gtctcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 560	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 560	
tgtgtggta ttgctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 561	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 561	
tgtgtggta tcctcgcccc gggaggaagc tacataccta cattt	45
SEQ ID NO: 562	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 562	
tgtgtggta ccaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 563	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 563	
tgtgtggta cgcttcgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 564	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 564
tgtgtggtga gactggcttc aggaggaagc tacataccta cattt          45

SEQ ID NO: 565      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 565
tgtgtggtgg ctcaaggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 566      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 566
tgtgtggtga agagggcctc cggaggaagc tacataccta cattt          45

SEQ ID NO: 567      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 567
tgtgtggtgt tctcgccatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 568      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 568
tgtgtggtga gctccgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 569      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 569
tgtgtggtgc ctcatgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 570      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 570
tgtgtggtga gcaaggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 571      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 571
tgtgtggtga acaggcgac aggaggaagc tacataccta cattt          45

SEQ ID NO: 572      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 572
tgtgtggtga agggtgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 573      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 573

```

-continued

tgtgtggtgc gccatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 574	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 574	
tgtgtggtga ccggcgcctc aggaggaagc tacataccta cattt	45
SEQ ID NO: 575	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 575	
tgtgtggtga gcgtcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 576	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 576	
tgtgtggtga acatggccca aggaggaagc tacataccta cattt	45
SEQ ID NO: 577	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 577	
tgtgtggtga acatagccat cggaggaagc tacataccta cattt	45
SEQ ID NO: 578	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 578	
tgtgtggtga acatagcgtc aggaggaagc tacataccta cattt	45
SEQ ID NO: 579	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 579	
tgtgtggtgtt ccgtcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 580	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 580	
tgtgtggtga gttctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 581	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 581	
tgtgtggtgtt cccttgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 582	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 582	
tgtgtggtga acaaaggcctc aggaggaagc tacataccta cattt	45
SEQ ID NO: 583	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 583
tgtgtggta tcatcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 584      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 584
tgtgtggta acggggcgcc aggaggaagc tacataccta cattt          45

SEQ ID NO: 585      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 585
tgtgtggta aaacggcgcc aggaggaagc tacataccta cattt          45

SEQ ID NO: 586      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 586
tgtgtggtcc gcgttagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 587      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 587
tgtgtggta gatcgccatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 588      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 588
tgtgtggta acatggcgcc aggaggaagc tacataccta cattt          45

SEQ ID NO: 589      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 589
tgtgtggta gaatcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 590      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 590
tgtgtggta ccttggccatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 591      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 591
tgtgtgggg cgtagcgttc aggaggaagc tacataccta cattt          45

SEQ ID NO: 592      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 592

```

-continued

tgtgtggta acatcgctc aggaggaago tacataccta cattt	45
SEQ ID NO: 593	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 593	
tgtgtggtgt cgctcgcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 594	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 594	
tgtgtggta gacctggccgg gggaggaago tacataccta cattt	45
SEQ ID NO: 595	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 595	
tgtgtggta accgagacatc aggaggaago tacataccta cattt	45
SEQ ID NO: 596	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 596	
tgtgtggta atatgtgcacatc aggaggaago tacataccta cattt	45
SEQ ID NO: 597	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 597	
tgtgtggta acggcgccgc aggaggaago tacataccta cattt	45
SEQ ID NO: 598	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 598	
tgtgtggta acttagcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 599	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 599	
tgtgtggtgg ccctcgcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 600	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 600	
tgtgtggtca agatcgcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 601	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 601	
tgtgtggtgt cggggggcgtc aggaggaago tacataccta cattt	45
SEQ ID NO: 602	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 602
tgtgtggta ctactgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 603      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 603
tgtgtggta gcacagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 604      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 604
tgtgtggta gacaggccgg gggaggaagc tacataccta cattt          45

SEQ ID NO: 605      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 605
tgtgtggta acctcgcccg cgagaggaagc tacataccta cattt          45

SEQ ID NO: 606      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 606
tgtgtggta acatggcaac aggaggaagc tacataccta cattt          45

SEQ ID NO: 607      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 607
tgtgtgggtt ctcgagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 608      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 608
tgtgtggta atcgtgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 609      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 609
tgtgtggta acatcgccctc aggaggaagc tacataccta cattt          45

SEQ ID NO: 610      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 610
tgtgtggttt ctcgagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 611      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 611

```

-continued

tgtgtggtgt cgcaggcgcc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 612	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 612		
tgtgtggtgtc ttcttagcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 613	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 613		
tgtgtgggtga tcgccccatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 614	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 614		
tgtgtgggtga ccatcgcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 615	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 615		
tgtgtgggtga gccccggatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 616	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 616		
tgtgtggtgtc ggcatcgatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 617	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 617		
tgtgtgggtga acccgccatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 618	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 618		
tgtgtgggtga actggggatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 619	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 619		
tgtgtgggtgg gcaccgcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 620	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 620		
tgtgtgggtga tcggccatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 621	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 621
tgtgtggtcc gcatggcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 622      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 622
tgtgtggtga tttttgcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 623      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 623
tgtgtggtga tctccgcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 624      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 624
tgtgtggtga cttccgcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 625      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 625
tgtgtggtga gccgagccattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 626      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 626
tgtgtggtgt cgctggcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 627      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 627
tgtgtggtga ggcaggcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 628      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 628
tgtgtggtcc gtctcgcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 629      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 629
tgtgtggtga gtggggcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 630      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 630

```

-continued

tgtgtggta ctttcgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 631	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 631	
tgtgtggta gggtcgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 632	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 632	
tgtgtggtgc gaacggcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 633	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 633	
tgtgtggta agcgccatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 634	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 634	
tgtgtggtct tccatgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 635	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 635	
tgtgtggta aggtcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 636	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 636	
tgtgtggtgg gggtggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 637	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 637	
tgtgtggtgt cctcgccatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 638	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 638	
tgtgtggta gctctgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 639	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 639	
tgtgtggta gggttgctcg aggaggaagc tacataccta cattt	45
SEQ ID NO: 640	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 640
tgtgtggta gaacggcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 641      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 641
tgtgtggta attccgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 642      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 642
tgtgtggta atcaagcttc aggaggaagc tacataccta cattt          45

SEQ ID NO: 643      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 643
tgtgtggta agatcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 644      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 644
tgtgtggtcc tacatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 645      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 645
tgtgtggta gttccgcgtt aggaggaagc tacataccta cattt          45

SEQ ID NO: 646      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 646
tgtgtggta agttcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 647      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 647
tgtgtggta gtatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 648      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 648
tgtgtggta agccggcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 649      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 649

```

-continued

tgtgtggtcc	gccgcgcatc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 650		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 650					
tgtgtggtct	ctcttgcatc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 651		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 651					
tgtgtggtga	gtatagcatc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 652		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 652					
tgtgtggtga	atagcgcggg	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 653		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 653					
tgtgtggtga	acgtggcagg	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 654		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 654					
tgtgtggtgt	ctttggcatc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 655		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 655					
tgtgtggtgt	cttctgcatc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 656		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 656					
tgtgtggtga	gcactgcatc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 657		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 657					
tgtgtggtgt	ggggggcatc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 658		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 658					
tgtgtggtga	ccacagccgg	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 659		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 659
tgtgtggta acctcgccgc aggaggaagc tacataccta cattt          45

SEQ ID NO: 660      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 660
tgtgtggtcc gactcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 661      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 661
tgtgtggtgt ccggcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 662      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 662
tgtgtggta gttccgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 663      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 663
tgtgtggta accttgccgc aggaggaagc tacataccta cattt          45

SEQ ID NO: 664      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 664
tgtgtggtgc gtctagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 665      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 665
tgtgtggta tccatgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 666      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 666
tgtgtggtcc atcttgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 667      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 667
tgtgtggta ctccggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 668      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 668

```

-continued

tgtgtggtgt ttcggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 669	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 669	
tgtgtggtga acgttagcagg gggaggaagc tacataccta cattt	45
SEQ ID NO: 670	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 670	
tgtgtggtga ctttggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 671	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 671	
tgtgtggtga tccttgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 672	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 672	
tgtgtggtga tccccgcgac aggaggaagc tacataccta cattt	45
SEQ ID NO: 673	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 673	
tgtgtggtga ccgttgcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 674	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 674	
tgtgtggtga acatggctgg aggaggaagc tacataccta cattt	45
SEQ ID NO: 675	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 675	
tgtgtggtga agacagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 676	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 676	
tgtgtggtac acgaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 677	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 677	
tgtgtggtcc ctcatgcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 678	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 678
tgtgtggta tcattgcac aggaggaagc tacataccta cattt      45

SEQ ID NO: 679      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 679
tgtgtggttt ggcggcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 680      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 680
tgtgtggta gtccctgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 681      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 681
tgtgtggta accctgcttc aggaggaagc tacataccta cattt      45

SEQ ID NO: 682      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 682
tgtgtggta acggggcttc aggaggaagc tacataccta cattt      45

SEQ ID NO: 683      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 683
tgtgtggta tcggtgcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 684      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 684
tgtgtggta gccccgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 685      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 685
tgtgtggta acgcagcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 686      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 686
tgtgtggtgg ctttcgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 687      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 687

```

-continued

tgtgtggta acaccgcggg aggaggaagc tacataccta cattt	45
SEQ ID NO: 688	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 688	
tgtgtggtcc ggatagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 689	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 689	
tgtgtggta tggccgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 690	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 690	
tgtgtggta acaaggccgc gggaggaagc tacataccta cattt	45
SEQ ID NO: 691	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 691	
tgtgtggta cccatgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 692	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 692	
tgtgtggta ccttagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 693	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 693	
tgtgtggta acgtggcgcc aggaggaagc tacataccta cattt	45
SEQ ID NO: 694	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 694	
tgtgtggta ggttcgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 695	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 695	
tgtgtggtgt cctttgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 696	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 696	
tgtgtggta ggtatgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 697	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 697
tgtgtggta ggcgtcaac aggaggaagc tacataccta cattt          45

SEQ ID NO: 698      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 698
tgtgtggta gggtagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 699      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 699
tgtgtggta actcgccagc aggaggaagc tacataccta cattt          45

SEQ ID NO: 700      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 700
tgtgtggta acgttagcagc aggaggaagc tacataccta cattt          45

SEQ ID NO: 701      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 701
tgtgtggta acatggccac aggaggaagc tacataccta cattt          45

SEQ ID NO: 702      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 702
tgtgtggtag gtcgggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 703      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 703
tgtgtggtcg ctacggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 704      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 704
tgtgtggttt cccatgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 705      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 705
tgtgtggta acgggtgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 706      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 706

```

-continued

tgtgtggtgc ggaccgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 707	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 707	
tgtgtggtgt caaaaagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 708	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 708	
tgtgtggtgg ccttagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 709	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 709	
tgtgtggtga acatcgccgc aggaggaagc tacataccta cattt	45
SEQ ID NO: 710	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 710	
tgtgtggttc gggaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 711	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 711	
tgtgtggttg ctcatgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 712	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 712	
tgtgtggtga aagttagctgg tggaggaagc tacataccta cattt	45
SEQ ID NO: 713	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 713	
tgtgtggtgc gtactgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 714	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 714	
tgtgtggtga acctcgccgg aggaggaagc tacataccta cattt	45
SEQ ID NO: 715	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 715	
tgtgtggtga acatagcgccgg aggaggaagc tacataccta cattt	45
SEQ ID NO: 716	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 716
tgtgtggta gtctggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 717      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 717
tgtgtggta gaggcgcacatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 718      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 718
tgtgtggta acaaagcccc aggaggaagc tacataccta cattt          45

SEQ ID NO: 719      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 719
tgtgtggtcc ctttcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 720      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 720
tgtgtggtgt ccctcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 721      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 721
tgtgtggtgt cgtctgcacatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 722      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 722
tgtgtggtgc cggttagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 723      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 723
tgtgtggtgc gacgcgcacatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 724      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 724
tgtgtggta gtcaggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 725      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 725

```

-continued

tgtgtggta gggtcgcggg aggaggaagc tacataccta cattt	45
SEQ ID NO: 726	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 726	
tgtgtggta gggcagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 727	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 727	
tgtgtggta ggactgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 728	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 728	
tgtgtggta gaaccgccca aggaggaagc tacataccta cattt	45
SEQ ID NO: 729	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 729	
tgtgtggta atattgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 730	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 730	
tgtgtggta acacggcggg aggaggaagc tacataccta cattt	45
SEQ ID NO: 731	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 731	
tgtgtggtgg cctccgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 732	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 732	
tgtgtggta ggtcgccatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 733	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 733	
tgtgtggtga ggcgcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 734	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 734	
tgtgtggtcc gacaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 735	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 735
tgtgtggtgg gcctcgcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 736      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 736
tgtgtggtga ccagcgctac aggaggaagc tacataccta cattt      45

SEQ ID NO: 737      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 737
tgtgtggtgt tcctcgcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 738      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 738
tgtgtggtga gtggaggcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 739      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 739
tgtgtggtga gggtcgcagc aggaggaagc tacataccta cattt      45

SEQ ID NO: 740      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 740
tgtgtggtga cctcagcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 741      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 741
tgtgtggtga acctggcgcc aggaggaagc tacataccta cattt      45

SEQ ID NO: 742      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 742
tgtgtggtga acgtggcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 743      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 743
tgtgtggtga agacggcatc aggaggaagc tacataccta cattt      45

SEQ ID NO: 744      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 744

```

-continued

tgtgtggtgt cttcgcctc aggaggaagc tacataccta cattt	45
SEQ ID NO: 745	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 745	
tgtgtggtga gcgggtgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 746	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 746	
tgtgtggtgc gccttagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 747	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 747	
tgtgtggtga gtcttagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 748	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 748	
tgtgtggtga acggggcccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 749	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 749	
tgtgtggtga acggggccca aggaggaagc tacataccta cattt	45
SEQ ID NO: 750	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 750	
tgtgtggtga aaatggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 751	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 751	
tgtgtggtga acccccgctc aggaggaagc tacataccta cattt	45
SEQ ID NO: 752	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 752	
tgtgtggtgc gccttgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 753	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 753	
tgtgtggtac gccatgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 754	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 754
tgtgtgggt tccttagcgc aggaggaagc tacataccta cattt          45

SEQ ID NO: 755      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 755
tgtgtggta acctcgccccg aggaggaagc tacataccta cattt          45

SEQ ID NO: 756      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 756
tgtgtggtcg ctcccgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 757      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 757
tgtgtggtgc ttggggccgc aggaggaagc tacataccta cattt          45

SEQ ID NO: 758      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 758
tgtgtggtgc tcggcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 759      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 759
tgtgtggta tgggtgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 760      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 760
tgtgtggta gattagcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 761      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 761
tgtgtggttc cccatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 762      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 762
tgtgtggta ccgatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 763      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 763

```

-continued

tgtgtggta ccgacgcac	aggaggaagc tacataccta cattt	45
SEQ ID NO: 764	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 764		
tgtgtggta acaaggcgac	aggaggaagc tacataccta cattt	45
SEQ ID NO: 765	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 765		
tgtgtggta atcgggcac	aggaggaagc tacataccta cattt	45
SEQ ID NO: 766	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 766		
tgtgtggta agggggccctc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 767	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 767		
tgtgtggtaggatggcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 768	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 768		
tgtgtggtaggatcatgcac	aggaggaagc tacataccta cattt	45
SEQ ID NO: 769	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 769		
tgtgtggtaggtttgcac	aggaggaagc tacataccta cattt	45
SEQ ID NO: 770	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 770		
tgtgtggta cccaaagcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 771	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 771		
tgtgtggta ggatagcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 772	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 772		
tgtgtggta ctgccgcac	aggaggaagc tacataccta cattt	45
SEQ ID NO: 773	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 773
tgtgtgggt ccccgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 774      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 774
tgtgtgggtga ttccctgcac tc aggaggaagc tacataccta cattt          45

SEQ ID NO: 775      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 775
tgtgtgggtga aggccatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 776      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 776
tgtgtgggtga ggcgggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 777      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 777
tgtgtgggtga gcctggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 778      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 778
tgtgtgggtga atttggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 779      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 779
tgtgtgggtga acagagcacc aggaggaagc tacataccta cattt          45

SEQ ID NO: 780      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 780
tgtgtgggtga ttccggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 781      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 781
tgtgtgggtga ttaccgcac tc aggaggaagc tacataccta cattt          45

SEQ ID NO: 782      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 782

```

-continued

tgtgtggta ttcttagcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 783	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 783	
tgtgtggta tctctgcacatc aggaggaago tacataccta cattt	45
SEQ ID NO: 784	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 784	
tgtgtggta atcctgcacatc aggaggaago tacataccta cattt	45
SEQ ID NO: 785	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 785	
tgtgtggta acttggcttc aggaggaago tacataccta cattt	45
SEQ ID NO: 786	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 786	
tgtgtggta acatcgctgc aggaggaago tacataccta cattt	45
SEQ ID NO: 787	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 787	
tgtgtggta acccaggcctc aggaggaago tacataccta cattt	45
SEQ ID NO: 788	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 788	
tgtgtggta accacgcacatc aggaggaago tacataccta cattt	45
SEQ ID NO: 789	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 789	
tgtgtggtcc tgcatgcacatc aggaggaago tacataccta cattt	45
SEQ ID NO: 790	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 790	
tgtgtggta ttctcgacatc aggaggaago tacataccta cattt	45
SEQ ID NO: 791	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 791	
tgtgtggta ttggggcacatc aggaggaago tacataccta cattt	45
SEQ ID NO: 792	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 792
tgtgtggtga acggggcgcg aggaggaagc tacataccta cattt          45

SEQ ID NO: 793      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 793
tgtgtggtga taggtgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 794      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 794
tgtgtggtga ccggcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 795      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 795
tgtgtggtga accggggggc aggaggaagc tacataccta cattt          45

SEQ ID NO: 796      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 796
tgtgtggtgc gtctcgatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 797      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 797
tgtgtggtgg ccgatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 798      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 798
tgtgtggtga ctcatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 799      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 799
tgtgtggtga acatgcacc aggaggaagc tacataccta cattt          45

SEQ ID NO: 800      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 800
tgtgtggtga ggagcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 801      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 801

```

-continued

tgtgtggta tcgctgcata	aggaggaagc tacataccta cattt	45
SEQ ID NO: 802	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 802		
tgtgtggta acagcgccgc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 803	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 803		
tgtgtggta cgcatgcata	aggaggaagc tacataccta cattt	45
SEQ ID NO: 804	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 804		
tgtgtggta acccggtccc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 805	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 805		
tgtgtggta gaggtgcata	aggaggaagc tacataccta cattt	45
SEQ ID NO: 806	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 806		
tgtgtggta aggctgcata	aggaggaagc tacataccta cattt	45
SEQ ID NO: 807	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 807		
tgtgtggta tcctcgata	aggaggaagc tacataccta cattt	45
SEQ ID NO: 808	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 808		
tgtgtggta acggggcgaa	gggaggaagc tacataccta cattt	45
SEQ ID NO: 809	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 809		
tgtgtggta acaaggcgaa	aggaggaagc tacataccta cattt	45
SEQ ID NO: 810	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 810		
tgtgtggta aactggccgt	cggaggaagc tacataccta cattt	45
SEQ ID NO: 811	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 811
tgtgtggta aaggcgcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 812      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 812
tgtgtggta agagggcgccc gggaggaagc tacataccta cattt           45

SEQ ID NO: 813      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 813
tgtgtggta acgctgcccag gggaggaagc tacataccta cattt           45

SEQ ID NO: 814      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 814
tgtgtggttc attatgcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 815      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 815
tgtgtgggg ctcatgcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 816      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 816
tgtgtggtcc agagtgcattc aggaggaagc tacataccta cattt           45

SEQ ID NO: 817      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 817
tgtgtggtgt tccttgcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 818      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 818
tgtgtggtgt ccttggcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 819      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 819
tgtgtgggg tccgagcatc aggaggaagc tacataccta cattt           45

SEQ ID NO: 820      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 820

```

-continued

tgtgtggta ttgttagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 821	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 821	
tgtgtggta actctgcgtc aggaggaagc tacataccta cattt	45
SEQ ID NO: 822	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 822	
tgtgtggta acggggcagc aggaggaagc tacataccta cattt	45
SEQ ID NO: 823	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 823	
tgtgtggtgg ggaccgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 824	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 824	
tgtgtggta acggagcccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 825	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 825	
tgtgtggta ttatcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 826	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 826	
tgtgtggtgt ctccggccat gggaggaagc tacataccta cattt	45
SEQ ID NO: 827	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 827	
tgtgtggta agaacgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 828	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 828	
tgtgtggtgc ttcatgcac tacataccta cattt	45
SEQ ID NO: 829	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 829	
tgtgtggta ccgcccgcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 830	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 830
tgtgtggta aacatgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 831      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 831
tgtgtggttt cccttcaggc aggaggaagc tacataccta cattt      45

SEQ ID NO: 832      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 832
tgtgtggta tgaccgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 833      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 833
tgtgtggta cgccatgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 834      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 834
tgtgtggta gctttgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 835      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 835
tgtgtggta aaagggtgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 836      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 836
tgtgtggta aacgggcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 837      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 837
tgtgtggta ccgggtgcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 838      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 838
tgtgtggta aaggaggcattc aggaggaagc tacataccta cattt      45

SEQ ID NO: 839      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 839

```

-continued

tgtgtggta tgctggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 840	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 840	
tgtgtggta acgaggcaac aggaggaagc tacataccta cattt	45
SEQ ID NO: 841	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 841	
tgtgtggtgt cccgcgcctc aggaggaagc tacataccta cattt	45
SEQ ID NO: 842	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 842	
tgtgtggta cgctggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 843	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 843	
tgtgtggta acatggcccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 844	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 844	
tgtgtggtgt taccggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 845	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 845	
tgtgtggta ataccgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 846	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 846	
tgtgtggta actatgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 847	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 847	
tgtgtggttc cctttgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 848	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 848	
tgtgtggttt tcgggtgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 849	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 849
tgtgtggta gacaggcattc agggagaac tacataccta cattt          45

SEQ ID NO: 850      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 850
tgtgtggttc agggggcattc agggagaac tacataccta cattt          45

SEQ ID NO: 851      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 851
tgtgtggta ggccctgcattc agggagaac tacataccta cattt          45

SEQ ID NO: 852      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 852
tgtgtggta atggggcattc agggagaac tacataccta cattt          45

SEQ ID NO: 853      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 853
tgtgtggta actccgcattc agggagaac tacataccta cattt          45

SEQ ID NO: 854      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 854
tgtgtggttc gaatggcattc agggagaac tacataccta cattt          45

SEQ ID NO: 855      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 855
tgtgtggta ggtctgcattc agggagaac tacataccta cattt          45

SEQ ID NO: 856      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 856
tgtgtggta gggcgccattc agggagaac tacataccta cattt          45

SEQ ID NO: 857      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 857
tgtgtggta acatggcccc cggaggaac tacataccta cattt          45

SEQ ID NO: 858      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 858

```

-continued

tgtgtggta tctcgccatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 859	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 859	
tgtgtggta ttgttgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 860	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 860	
tgtgtggta cgtccgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 861	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 861	
tgtgtggta actgggggggg aggaggaagc tacataccta cattt	45
SEQ ID NO: 862	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 862	
tgtgtggta cctccgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 863	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 863	
tgtgtggta catatgcac tc aggaggaagc tacataccta cattt	45
SEQ ID NO: 864	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 864	
tgtgtggta acggaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 865	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 865	
tgtgtggta ccttggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 866	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 866	
tgtgtggta gtccccgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 867	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 867	
tgtgtggtcg gcgatgcac tc aggaggaagc tacataccta cattt	45
SEQ ID NO: 868	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 868
tgtgtggtga acacagctcg aggaggaagc tacataccta cattt          45

SEQ ID NO: 869      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 869
tgtgtggtct acttggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 870      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 870
tgtgtggtgg ttcatgcac aggaggaagc tacataccta cattt          45

SEQ ID NO: 871      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 871
tgtgtggtga gtacacgcac aggaggaagc tacataccta cattt          45

SEQ ID NO: 872      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 872
tgtgtggtga accaggccac aggaggaagc tacataccta cattt          45

SEQ ID NO: 873      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 873
tgtgtggtga tcaccgcac aggaggaagc tacataccta cattt          45

SEQ ID NO: 874      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 874
tgtgtggtga acagacgcac aggaggaagc tacataccta cattt          45

SEQ ID NO: 875      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 875
tgtgtggtgc gtcaagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 876      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 876
tgtgtggtgc gcggagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 877      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 877

```

-continued

tgtgtggtgg cctgggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 878	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 878	
tgtgtggtga ggggtgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 879	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 879	
tgtgtggtga acggggcacc aggaggaagc tacataccta cattt	45
SEQ ID NO: 880	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 880	
tgtgtggtga attagcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 881	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 881	
tgtgtggtgt ggaccgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 882	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 882	
tgtgtggtgc tacatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 883	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 883	
tgtgtggtga gactcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 884	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 884	
tgtgtggtga ttgctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 885	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 885	
tgtgtggtga tctacgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 886	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 886	
tgtgtggtga ctatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 887	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

source 1..45
mol_type = genomic DNA
organism = Homo sapiens

SEQUENCE: 887
tgcgtgggttc ctcccgcatc aggaggaagc tacataccta cattt 45

SEQ ID NO: 888 moltype = DNA length = 45
FEATURE Location/Qualifiers
source 1..45
mol_type = genomic DNA
organism = Homo sapiens

SEQUENCE: 888
tgcgtgggtta gactcgcatac aggaggaagc tacataccta cattt 45

SEQ ID NO: 889 moltype = DNA length = 45
FEATURE Location/Qualifiers
source 1..45
mol_type = genomic DNA
organism = Homo sapiens

SEQUENCE: 889
tgcgtgggtgg accatgcatac aggaggaagc tacataccta cattt 45

SEQ ID NO: 890 moltype = DNA length = 45
FEATURE Location/Qualifiers
source 1..45
mol_type = genomic DNA
organism = Homo sapiens

SEQUENCE: 890
tgcgtgggtga ttcacgcatac aggaggaagc tacataccta cattt 45

SEQ ID NO: 891 moltype = DNA length = 45
FEATURE Location/Qualifiers
source 1..45
mol_type = genomic DNA
organism = Homo sapiens

SEQUENCE: 891
tgcgtgggtgg acgacgcatac aggaggaagc tacataccta cattt 45

SEQ ID NO: 892 moltype = DNA length = 45
FEATURE Location/Qualifiers
source 1..45
mol_type = genomic DNA
organism = Homo sapiens

SEQUENCE: 892
tgcgtgggtga agggggcccc aggaggaagc tacataccta cattt 45

SEQ ID NO: 893 moltype = DNA length = 45
FEATURE Location/Qualifiers
source 1..45
mol_type = genomic DNA
organism = Homo sapiens

SEQUENCE: 893
tgcgtgggtct accccgcatac aggaggaagc tacataccta cattt 45

SEQ ID NO: 894 moltype = DNA length = 45
FEATURE Location/Qualifiers
source 1..45
mol_type = genomic DNA
organism = Homo sapiens

SEQUENCE: 894
tgcgtgggtgc cgccagctcc aggaggaagc tacataccta cattt 45

SEQ ID NO: 895 moltype = DNA length = 45
FEATURE Location/Qualifiers
source 1..45
mol_type = genomic DNA
organism = Homo sapiens

SEQUENCE: 895
tgcgtgggtgt cccaggcatc aggaggaagc tacataccta cattt 45

SEQ ID NO: 896 moltype = DNA length = 45
FEATURE Location/Qualifiers
source 1..45
mol_type = genomic DNA
organism = Homo sapiens

SEQUENCE: 896

-continued

tgtgtggta tttcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 897	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 897	
tgtgtggta tcctggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 898	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 898	
tgtgtggta tcccgccgtc aggaggaagc tacataccta cattt	45
SEQ ID NO: 899	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 899	
tgtgtggta ctccccatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 900	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 900	
tgtgtggta accggggccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 901	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 901	
tgtgtggta actcgccga aggggaaagc tacataccta cattt	45
SEQ ID NO: 902	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 902	
tgtgtggtc tccatgcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 903	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 903	
tgtgtggtgt taggggcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 904	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 904	
tgtgtggtgt actttgcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 905	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 905	
tgtgtggta acgaggcgac aggaggaagc tacataccta cattt	45
SEQ ID NO: 906	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 906
tgtgtggta acaacgcatac aggaggaagc tacataccta cattt      45

SEQ ID NO: 907      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 907
tgtgtggta gtttcgcatac aggaggaagc tacataccta cattt      45

SEQ ID NO: 908      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 908
tgtgtggta accggaggcc agggaggaagc tacataccta cattt      45

SEQ ID NO: 909      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 909
tgtgtggta acggcgctcc agggaggaagc tacataccta cattt      45

SEQ ID NO: 910      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 910
tgtgtggta acatggcgcc agggaggaagc tacataccta cattt      45

SEQ ID NO: 911      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 911
tgtgtggtcc gatccgcatac agggaggaagc tacataccta cattt      45

SEQ ID NO: 912      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 912
tgtgtggta ttttggcatac agggaggaagc tacataccta cattt      45

SEQ ID NO: 913      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 913
tgtgtggta ggcgcgcatac agggaggaagc tacataccta cattt      45

SEQ ID NO: 914      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 914
tgtgtggta actcagcaaa agggaggaagc tacataccta cattt      45

SEQ ID NO: 915      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 915

```

-continued

tgtgtggttc tccttgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 916	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 916	
tgtgtggtgc gaatggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 917	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 917	
tgtgtggtga gatatgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 918	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 918	
tgtgtggta tcccgccatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 919	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 919	
tgtgtggtga ggcgtgcggc aggaggaagc tacataccta cattt	45
SEQ ID NO: 920	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 920	
tgtgtggtgc ctgaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 921	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 921	
tgtgtggtgg gccgggcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 922	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 922	
tgtgtggtga tgcgagcctc aggaggaagc tacataccta cattt	45
SEQ ID NO: 923	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 923	
tgtgtggtga acggggccctc aggaggaagc tacataccta cattt	45
SEQ ID NO: 924	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 924	
tgtgtggtga aggaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 925	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 925
tgtgtggta cccatgcac aggaggaagc tacataccta cattt          45

SEQ ID NO: 926      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 926
tgtgtggta acagcgccgg aggaggaagc tacataccta cattt          45

SEQ ID NO: 927      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 927
tgtgtggta tccgagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 928      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 928
tgtgtggta ccgaggcgtc aggaggaagc tacataccta cattt          45

SEQ ID NO: 929      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 929
tgtgtggta aatctgcac aggaggaagc tacataccta cattt          45

SEQ ID NO: 930      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 930
tgtgtggta acggggcgcc aggaggaagc tacataccta cattt          45

SEQ ID NO: 931      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 931
tgtgtggta gcaggcgatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 932      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 932
tgtgtggta accccgcctc aggaggaagc tacataccta cattt          45

SEQ ID NO: 933      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 933
tgtgtggta acagtgcgtc aggaggaagc tacataccta cattt          45

SEQ ID NO: 934      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 934

```

-continued

tgtgtggta aggccggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 935	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 935	
tgtgtggtgc ccaccgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 936	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 936	
tgtgtggtcc gcgaggcttc aggaggaagc tacataccta cattt	45
SEQ ID NO: 937	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 937	
tgtgtggtgg cccatgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 938	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 938	
tgtgtggta ttggagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 939	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 939	
tgtgtggta cggggcgccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 940	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 940	
tgtgtggta gcgatgcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 941	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 941	
tgtgtggta cgttggcgcc aggaggaagc tacataccta cattt	45
SEQ ID NO: 942	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 942	
tgtgtggta acatggcgga aggaggaagc tacataccta cattt	45
SEQ ID NO: 943	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 943	
tgtgtggta gtttagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 944	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 944
tgtgtgttga ggaccggccag gggaggaagc tacataccta cattt          45

SEQ ID NO: 945      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 945
tgtgtgtgttgc ctaaaggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 946      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 946
tgtgtgtgttgc gtgtcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 947      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 947
tgtgtgtgttgc cctccgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 948      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 948
tgtgtgtgttgc agctcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 949      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 949
tgtgtgtgttgc gtacggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 950      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 950
tgtgtgtgttgc ggtatggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 951      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 951
tgtgtgtgttgc gaatggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 952      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 952
tgtgtgtgttgc actcagccgc aggaggaagc tacataccta cattt          45

SEQ ID NO: 953      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 953

```

-continued

tgtgtggta acatcgacg	aggaggaagc tacataccta cattt	45
SEQ ID NO: 954	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 954		
tgtgtggtgc ggaccgcttc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 955	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 955		
tgtgtggtgc gacgagcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 956	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 956		
tgtgtggta gcacatcgatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 957	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 957		
tgtgtggtgt cccaggcgcc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 958	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 958		
tgtgtggtgt cccttagcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 959	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 959		
tgtgtggtgc acgtcgatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 960	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 960		
tgtgtggta tcgtcgatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 961	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 961		
tgtgtggtga ccctcgccgg	ggggaggaagc tacataccta cattt	45
SEQ ID NO: 962	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 962		
tgtgtggtga ggcttgccgg	ggggaggaagc tacataccta cattt	45
SEQ ID NO: 963	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 963
tgtgtggta gtactgcac agggagaagc tacataccta cattt          45

SEQ ID NO: 964      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 964
tgtgtggta ggtcgccctc agggagaagc tacataccta cattt          45

SEQ ID NO: 965      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 965
tgtgtggta acgtcgcaac agggagaagc tacataccta cattt          45

SEQ ID NO: 966      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 966
tgtgtggta acatggccgc agggagaagc tacataccta cattt          45

SEQ ID NO: 967      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 967
tgtgtggta actcagcgcc gggaggaagc tacataccta cattt          45

SEQ ID NO: 968      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 968
tgtgtgggt ttaccgcac agggagaagc tacataccta cattt          45

SEQ ID NO: 969      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 969
tgtgtggta gaagtgcac agggagaagc tacataccta cattt          45

SEQ ID NO: 970      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 970
tgtgtgggtt ccggggcac agggagaagc tacataccta cattt          45

SEQ ID NO: 971      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 971
tgtgtggta acgtcgccac agggagaagc tacataccta cattt          45

SEQ ID NO: 972      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 972

```

-continued

tgtgtggttt ccctcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 973	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 973	
tgtgtggtgt ttgtggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 974	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 974	
tgtgtgggtga cctatgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 975	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 975	
tgtgtggttt accttgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 976	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 976	
tgtgtgggtga atgtcgcaagg gggaggaagc tacataccta cattt	45
SEQ ID NO: 977	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 977	
tgtgtgggtga acatagccgg aggaggaagc tacataccta cattt	45
SEQ ID NO: 978	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 978	
tgtgtgggtga atgaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 979	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 979	
tgtgtgggtga tccttagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 980	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 980	
tgtgtgggttg tctttgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 981	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 981	
tgtgtgggtga ataaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 982	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 982
tgtgtggta gacttgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 983      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 983
tgtgtggtcg cccatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 984      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 984
tgtgtggtaa ggtctgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 985      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 985
tgtgtggtgc cgaccgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 986      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 986
tgtgtggtgc gtagtgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 987      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 987
tgtgtggta tccttagcttc aggaggaagc tacataccta cattt          45

SEQ ID NO: 988      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 988
tgtgtggtgc gacatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 989      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 989
tgtgtggttg cccatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 990      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 990
tgtgtggta ttcccgccattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 991      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 991

```

-continued

tgtgtggta cctccgccccg aggaggaagc tacataccta cattt	45
SEQ ID NO: 992	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 992	
tgtgtggta acatcgcttc aggaggaagc tacataccta cattt	45
SEQ ID NO: 993	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 993	
tgtgtggta acatcgccccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 994	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 994	
tgtgtggta acagggccgg aggaggaagc tacataccta cattt	45
SEQ ID NO: 995	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 995	
tgtgtggta acaaggcctc aggaggaagc tacataccta cattt	45
SEQ ID NO: 996	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 996	
tgtgtggttt ttcatgcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 997	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 997	
tgtgtggta taagggcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 998	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 998	
tgtgtggta cccgtgcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 999	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 999	
tgtgtggta acaacgcaag aggaggaagc tacataccta cattt	45
SEQ ID NO: 1000	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1000	
tgtgtggttt cccgagcac aggaggaagc tacataccta cattt	45
SEQ ID NO: 1001	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1001
tgtgtggta ccgcggcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1002      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1002
tgtgtggta acattgcggc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1003      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1003
tgtgtggtcc cccatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1004      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1004
tgtgtggta acctcgccattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1005      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1005
tgtgtggtgc ggggagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1006      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1006
tgtgtggtgc cacatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1007      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1007
tgtgtggtgc cctctgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1008      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1008
tgtgtggtct ccgttcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1009      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1009
tgtgtggta gtggggcgca gggaggaagc tacataccta cattt          45

SEQ ID NO: 1010      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1010

```

-continued

tgtgtggttc gatccgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 1011	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1011	
tgtgtggta gaaaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1012	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1012	
tgtgtggta acatcgacata aggaggaagc tacataccta cattt	45
SEQ ID NO: 1013	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1013	
tgtgtggta gggctgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 1014	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1014	
tgtgtggta atatcgacata aggaggaagc tacataccta cattt	45
SEQ ID NO: 1015	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1015	
tgtgtggta agaccgcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 1016	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1016	
tgtgtggta atagtggccgt aggaggaagc tacataccta cattt	45
SEQ ID NO: 1017	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1017	
tgtgtggta ggagggcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 1018	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1018	
tgtgtggta acatggccgg tggaggaagc tacataccta cattt	45
SEQ ID NO: 1019	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1019	
tgtgtgggg gcacggcatac aggaggaagc tacataccta cattt	45
SEQ ID NO: 1020	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1020
tgtgtggta gcaatgcatac agggagaac tacataccta cattt          45

SEQ ID NO: 1021      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1021
tgtgtggta aatggcgag gggaggaac tacataccta cattt          45

SEQ ID NO: 1022      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1022
tgtgtggta aggttcatac agggagaac tacataccta cattt          45

SEQ ID NO: 1023      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1023
tgtgtggtaa aacatgcatac agggagaac tacataccta cattt          45

SEQ ID NO: 1024      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1024
tgtgtggtaa gagccgcatac agggagaac tacataccta cattt          45

SEQ ID NO: 1025      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1025
tgtgtggtaa acatggcatac cgaggaaac tacataccta cattt          45

SEQ ID NO: 1026      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1026
tgtgtggtaa gatccgcatac agggagaac tacataccta cattt          45

SEQ ID NO: 1027      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1027
tgtgtggtaa acatggcatac cgaggaaac tacataccta cattt          45

SEQ ID NO: 1028      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1028
tgtgtggtgcccaggcgaaa gggaggaac tacataccta cattt          45

SEQ ID NO: 1029      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1029

```

-continued

tgtgtggta cttggcggg gggaggaagc tacataccta cattt	45
SEQ ID NO: 1030	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1030	
tgtgtggta gagtcgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1031	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1031	
tgtgtggtgt ctactgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1032	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1032	
tgtgtggtgc gttggccgg ggggggaagc tacataccta cattt	45
SEQ ID NO: 1033	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1033	
tgtgtggtgc ggactgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1034	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1034	
tgtgtggta acgtcgccgc cggaggaagc tacataccta cattt	45
SEQ ID NO: 1035	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1035	
tgtgtggtgg ccgacgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1036	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1036	
tgtgtggta acaggcgccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1037	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1037	
tgtgtggta ctctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1038	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1038	
tgtgtggtgg ttctcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1039	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1039
tgtgtggta ggggggcgga gggaggaagc tacataccta cattt          45

SEQ ID NO: 1040      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1040
tgtgtggta acggggctac agggaggaagc tacataccta cattt          45

SEQ ID NO: 1041      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1041
tgtgtggtg ctgttagcatc agggaggaagc tacataccta cattt          45

SEQ ID NO: 1042      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1042
tgtgtggta ctccagcatc agggaggaagc tacataccta cattt          45

SEQ ID NO: 1043      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1043
tgtgtggta tgggcgcatc agggaggaagc tacataccta cattt          45

SEQ ID NO: 1044      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1044
tgtgtggta tccgcgcatc agggaggaagc tacataccta cattt          45

SEQ ID NO: 1045      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1045
tgtgtggta gtgtatgcac agggaggaagc tacataccta cattt          45

SEQ ID NO: 1046      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1046
tgtgtggtcc agcatgcac agggaggaagc tacataccta cattt          45

SEQ ID NO: 1047      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1047
tgtgtggta agagggcctc agggaggaagc tacataccta cattt          45

SEQ ID NO: 1048      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1048

```

-continued

tgtgtggtcc tcctcgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1049	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1049	
tgtgtggtga tgggggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1050	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1050	
tgtgtggtga agagtgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1051	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1051	
tgtgtggtgg accaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1052	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1052	
tgtgtggtga actgggctgc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1053	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1053	
tgtgtggtga aagatgcacatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1054	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1054	
tgtgtggtgt cccaaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1055	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1055	
tgtgtggtga accttcgcgcgc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1056	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1056	
tgtgtggtca cggggggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1057	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1057	
tgtgtggtga acgttcgcacc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1058	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1058
tgtgtggta ttgcagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1059      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1059
tgtgtggta tacatgcacatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1060      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1060
tgtgtggta atccagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1061      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1061
tgtgtggta agccccgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1062      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1062
tgtgtggta agggggcagg aggaggaagc tacataccta cattt          45

SEQ ID NO: 1063      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1063
tgtgtggtgc cgggggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1064      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1064
tgtgtggttt tcggggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1065      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1065
tgtgtggtgt cccatgcctc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1066      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1066
tgtgtggtgg ccgttagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1067      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1067

```

-continued

tgtgtggta cccttgagg gggaggaago tacataccta cattt	45
SEQ ID NO: 1068	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1068	
tgtgtggta caaacgcacc aggaggaago tacataccta cattt	45
SEQ ID NO: 1069	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1069	
tgtgtggta acttggccgt gggaggaago tacataccta cattt	45
SEQ ID NO: 1070	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1070	
tgtgtggta acgctgcagc aggaggaago tacataccta cattt	45
SEQ ID NO: 1071	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1071	
tgtgtggta acacacgcac aggaggaago tacataccta cattt	45
SEQ ID NO: 1072	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1072	
tgtgtggta atccccatc aggaggaago tacataccta cattt	45
SEQ ID NO: 1073	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1073	
tgtgtggtcc tccctgcac aggaggaago tacataccta cattt	45
SEQ ID NO: 1074	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1074	
tgtgtggta gggacgcac aggaggaago tacataccta cattt	45
SEQ ID NO: 1075	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1075	
tgtgtggtga cggtgcac aggaggaago tacataccta cattt	45
SEQ ID NO: 1076	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1076	
tgtgtggtcc acgatgcac aggaggaago tacataccta cattt	45
SEQ ID NO: 1077	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1077
tgtgtggtga tcgttgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1078      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1078
tgtgtggtga accttgccgc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1079      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1079
tgtgtggtga acgaagcttc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1080      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1080
tgtgtggtga ttttagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1081      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1081
tgtgtggtga ctgtcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1082      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1082
tgtgtggtga acatcgccccg cgaggagaagc tacataccta cattt          45

SEQ ID NO: 1083      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1083
tgtgtggtga acatagcccc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1084      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1084
tgtgtggtga acattgcagc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1085      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1085
tgtgtggtga acccgccaac aggaggaagc tacataccta cattt          45

SEQ ID NO: 1086      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1086

```

-continued

tgtgtggta acaaggcagc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1087	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1087	
tgtgtggta aacctgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1088	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1088	
tgtgtggttg ggggtggcgcc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1089	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1089	
tgtgtggtct atcttagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1090	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1090	
tgtgtggtgt ctcatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1091	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1091	
tgtgtggtgg cacatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1092	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1092	
tgtgtggttc ttcatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1093	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1093	
tgtgtggta ccggagcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1094	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1094	
tgtgtggta atgatgcattc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1095	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1095	
tgtgtggta actccgcccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1096	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1096
tgtgtggtga agcttgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1097      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1097
tgtgtggtga tcatacgctc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1098      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1098
tgtgtggtgt cctccgcatac aggaggaagc tacataccta cattt          45

SEQ ID NO: 1099      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1099
tgtgtggtga tttcagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1100      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1100
tgtgtggtga gcgctgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1101      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1101
tgtgtggtga agggggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1102      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1102
tgtgtggtga accgtgcccc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1103      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1103
tgtgtggtga agtacgcatac aggaggaagc tacataccta cattt          45

SEQ ID NO: 1104      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1104
tgtgtggtgg tacatgcatac aggaggaagc tacataccta cattt          45

SEQ ID NO: 1105      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1105

```

-continued

tgtgtggtca acggggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1106	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1106	
tgtgtggtga cacaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1107	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1107	
tgtgtggtgc ccctggcgac aggaggaagc tacataccta cattt	45
SEQ ID NO: 1108	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1108	
tgtgtggtga ttcttgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1109	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1109	
tgtgtggtga acgaggcgaa aggaggaagc tacataccta cattt	45
SEQ ID NO: 1110	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1110	
tgtgtggtga ttcccgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1111	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1111	
tgtgtggtga ttgcggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1112	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1112	
tgtgtggtgc gggttgcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1113	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1113	
tgtgtggtga acagggcccc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1114	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1114	
tgtgtggtgg agcaaggcatc aggaggaagc tacataccta cattt	45
SEQ ID NO: 1115	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1115
tgtgtggtcc gggcgccatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1116      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1116
tgtgtggtct acatggcccc gggaggaagc tacataccta cattt          45

SEQ ID NO: 1117      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1117
tgtgtggtcc gcatacgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1118      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1118
tgtgtggtga tcttcgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1119      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1119
tgtgtggtgt cccgtgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1120      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1120
tgtgtggtgtc gtggggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1121      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1121
tgtgtggtga ctgttgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1122      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1122
tgtgtggtgtc ccgttgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1123      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1123
tgtgtggtga acatcgagg aggaggaagc tacataccta cattt          45

SEQ ID NO: 1124      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1124

```

-continued

tgtgtggtcc	ggggggcatc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 1125		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 1125					
tgtgtggtat	ttcatgcattc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 1126		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 1126					
tgtgtggtga	gccctgcattc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 1127		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 1127					
tgtgtggtgt	ccaccgcattc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 1128		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 1128					
tgtgtggtga	acttggcgtc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 1129		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 1129					
tgtgtggtga	ggagagcatc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 1130		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 1130					
tgtgtggtga	gttcagcatc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 1131		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 1131					
tgtgtggttc	gcctcgcattc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 1132		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 1132					
tgtgtggtga	acagggcgcc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 1133		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			
source		1..45			
		mol_type = genomic DNA			
		organism = Homo sapiens			
SEQUENCE: 1133					
tgtgtggtga	cgccctgcattc	aggaggaagc	tacataccta	cattt	45
SEQ ID NO: 1134		moltype = DNA	length = 45		
FEATURE		Location/Qualifiers			

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1134
tgtgtggta accggggcac aggaggaagc tacataccta cattt          45

SEQ ID NO: 1135      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1135
tgtgtggtct cccttagcgccc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1136      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1136
tgtgtggta gcccgtttc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1137      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1137
tgtgtggtgt ctatgtcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1138      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1138
tgtgtggtgg cccttgcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1139      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1139
tgtgtggta tgcatgtcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1140      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1140
tgtgtggta accaggcctc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1141      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1141
tgtgtggtta tgaaggcgga aggaggaagc tacataccta cattt          45

SEQ ID NO: 1142      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1142
tgtgtggta accccgcttc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1143      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1143

```

-continued

tgtgtggta acggagcagt	aggaggaago tacataccta cattt	45
SEQ ID NO: 1144	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1144		
tgtgtggtcc gttctgcattc	aggaggaago tacataccta cattt	45
SEQ ID NO: 1145	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1145		
tgtgtggta ttaatgcattc	aggaggaago tacataccta cattt	45
SEQ ID NO: 1146	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1146		
tgtgtggta ccagtgcattc	aggaggaago tacataccta cattt	45
SEQ ID NO: 1147	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1147		
tgtgtggta gctcgccattc	aggaggaago tacataccta cattt	45
SEQ ID NO: 1148	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1148		
tgtgtggtcc ccccgccattc	aggaggaago tacataccta cattt	45
SEQ ID NO: 1149	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1149		
tgtgtggtcc gtagggcattc	aggaggaago tacataccta cattt	45
SEQ ID NO: 1150	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1150		
tgtgtggtgt cctcagcattc	aggaggaago tacataccta cattt	45
SEQ ID NO: 1151	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1151		
tgtgtggta gagtagcattc	aggaggaago tacataccta cattt	45
SEQ ID NO: 1152	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1152		
tgtgtggtgg cccaggcattc	aggaggaago tacataccta cattt	45
SEQ ID NO: 1153	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1153
tgtgtgggt ctctagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1154      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1154
tgtgtgggtga actctgcgac aggaggaagc tacataccta cattt          45

SEQ ID NO: 1155      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1155
tgtgtgggtga gtgtggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1156      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1156
tgtgtgggtga acatcgccgg aggaggaagc tacataccta cattt          45

SEQ ID NO: 1157      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1157
tgtgtgggtga acctcgcagg gggaggaagc tacataccta cattt          45

SEQ ID NO: 1158      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1158
tgtgtgggtga gccccccatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1159      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1159
tgtgtgggtga gagggggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1160      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1160
tgtgtgggtgt tccaggcctc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1161      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1161
tgtgtgggtga ctgctgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1162      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1162

```

-continued

tgtgtggta gagaaggctg gggaggaago tacataccta cattt	45
SEQ ID NO: 1163	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1163	
tgtgtggta actccgcggg aggaggaago tacataccta cattt	45
SEQ ID NO: 1164	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1164	
tgtgtggtg tcctcgcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 1165	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1165	
tgtgtggta atctggcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 1166	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1166	
tgtgtggtg gcgttagcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 1167	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1167	
tgtgtggta acgtcgccgc aggaggaago tacataccta cattt	45
SEQ ID NO: 1168	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1168	
tgtgtggta attcggcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 1169	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1169	
tgtgtggta acgaaggctc aggaggaago tacataccta cattt	45
SEQ ID NO: 1170	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1170	
tgtgtggta ggaaggcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 1171	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1171	
tgtgtggta ccccgccatc aggaggaago tacataccta cattt	45
SEQ ID NO: 1172	moltype = DNA length = 45
FEATURE	Location/Qualifiers

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1172
tgtgtggta aagcggcagc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1173      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1173
tgtgtggta acgtatgcac aggaggaagc tacataccta cattt          45

SEQ ID NO: 1174      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1174
tgtgtggta accccggccct gggaggaagc tacataccta cattt          45

SEQ ID NO: 1175      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1175
tgtgtggta agcttcgcac aggaggaagc tacataccta cattt          45

SEQ ID NO: 1176      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1176
tgtgtggta gacggggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1177      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1177
tgtgtggta acgaaggcgtc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1178      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1178
tgtgtggtgg ccggggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1179      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1179
tgtgtggta gcgggacatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1180      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1180
tgtgtggta acgcggcccc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1181      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1181

```

-continued

tgtgtggtgc gggccgcatac	aggaggaagc tacataccta cattt	45
SEQ ID NO: 1182	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1182		
tgtgtggtga acaccgcgtc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 1183	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1183		
tgtgtggtga ggcgagcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 1184	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1184		
tgtgtggtct ccggggcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 1185	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1185		
tgtgtggtga agactgcatac	aggaggaagc tacataccta cattt	45
SEQ ID NO: 1186	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1186		
tgtgtggtga ccggggcatc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 1187	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1187		
tgtgtggtga accccgcgtc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 1188	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1188		
tgtgtggtga acaatgcacc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 1189	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1189		
tgtgtggtga ctcctgcatac	aggaggaagc tacataccta cattt	45
SEQ ID NO: 1190	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	
source	1..45	
	mol_type = genomic DNA	
	organism = Homo sapiens	
SEQUENCE: 1190		
tgtgtggtga atggggccgc	aggaggaagc tacataccta cattt	45
SEQ ID NO: 1191	moltype = DNA length = 45	
FEATURE	Location/Qualifiers	

-continued

```

source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1191
tgtgtggta atcaggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1192      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1192
tgtgtggta gttttgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1193      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1193
tgtgtggta accccgcgac aggaggaagc tacataccta cattt          45

SEQ ID NO: 1194      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1194
tgtgtggtcc gcgaaggcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1195      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1195
tgtgtggta tctttgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1196      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1196
tgtgtggta cacacgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1197      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1197
tgtgtggtca ctcatgcattc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1198      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1198
tgtgtggta aggttagcatc aggaggaagc tacataccta cattt          45

SEQ ID NO: 1199      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1199
tgtgtggta acatcgcaac aggaggaagc tacataccta cattt          45

SEQ ID NO: 1200      moltype = DNA  length = 45
FEATURE
source          1..45
               mol_type = genomic DNA
               organism = Homo sapiens
SEQUENCE: 1200

```

-continued

tgtgtggtgt tccaggcgag gggaggaago tacataccta cattt	45
SEQ ID NO: 1201	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1201	
tgtgtggtga atggagcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 1202	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1202	
tgtgtggtcc cccttgcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 1203	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1203	
tgtgtggtga gtatggcatc aggaggaago tacataccta cattt	45
SEQ ID NO: 1204	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1204	
tgtgtggtga aaggtgcattc aggaggaago tacataccta cattt	45
SEQ ID NO: 1205	moltype = DNA length = 45
FEATURE	Location/Qualifiers
source	1..45
	mol_type = genomic DNA
	organism = Homo sapiens
SEQUENCE: 1205	
tgtgtggtga tcagtgcacc aggaggaago tacataccta cattt	45

1. A protein comprising an amino acid sequence according to SEQ ID NO: 1, wherein the amino acid in position 4 of SEQ ID NO: 1 is selected from the group consisting of N, S, R, T and I, and wherein the amino acid in position 5 of SEQ ID NO: 1 is selected from the group consisting of R, V, L, F, M, I, H, S, T, A, P and G, with the proviso that the amino acid sequence is not SEQ ID NO: 24.

2. The protein of claim 1, wherein the amino acid in position 7 of SEQ ID NO: 1 is A or S.

3. The protein of claim 1, wherein the amino acid sequence according to SEQ ID NO: 1 is selected from the amino acid sequences of any one of SEQ ID NO: 2 to 23 and SEQ ID NO: 25 to 295.

4. The protein of claim 1, wherein the protein is a T-cell receptor (TCR).

5. The protein of claim 4, wherein the amino acid sequence according to SEQ ID NO: 1 is comprised in the alpha chain of the TCR.

6. The protein of claim 5, wherein the amino acid sequence according to SEQ ID NO: 1 is comprised in CDR3 region.

7. A T-cell, comprising the protein of claim 1.

8. The T-cell of claim 7, wherein the T-cell is a human T-cell.

9. The T-cell of claim 7, wherein the T-cell is one or more selected from a CD4+ cell, a CD8+ cell, and and/or a CD161+ cell.

10. A nucleotide sequence encoding an amino acid sequence according to SEQ ID NO: 1, with the proviso that the amino acid sequence is not SEQ ID NO: 24.

11. (canceled)

12. (canceled)

13. A method of obtaining an antibody, comprising raising an antibody against the protein according to claim 1, wherein the antibody is directed against an epitope comprising at least a part of the amino acid sequence according to SEQ ID NO: 1 wherein the amino acid in position 4 of SEQ ID NO: 1 is selected from the group consisting of N, S, R, T and I, and wherein the amino acid in position 5 of SEQ ID NO: 1 is selected from the group consisting of R, V, L, F, M, I, H, S, T, A, P and G.

14. An antibody directed against an epitope comprising at least a part of the amino acid sequence according to SEQ ID NO: 1 wherein the amino acid in position 4 of SEQ ID NO: 1 is selected from the group consisting of N, S, R, T and I, and wherein the amino acid in position 5 of SEQ ID NO: 1 is selected from the group consisting of R, V, L, F, M, I, H, S, T, A, P and G.

15. A method of discriminating blood samples of IBD patients from blood samples of individuals without IBD,

comprising quantitatively assessing abundance in the samples of proteins according to claim 1.

16. The method of claim 15, wherein the method discriminates blood samples of Crohn's disease patients from blood samples of individuals without IBD and individuals with IBD other than Crohn's disease.

17. A method of obtaining an antibody, comprising raising an antibody against the T-cell according to claim 7, wherein the antibody is directed against an epitope comprising at least a part of the amino acid sequence according to SEQ ID NO: 1 wherein the amino acid in position 4 of SEQ ID NO: 1 is selected from the group consisting of N, S, R, T and I, and wherein the amino acid in position 5 of SEQ ID NO: 1 is selected from the group consisting of R, V, L, F, M, I, H, S, T, A, P and G.

18. A method of obtaining an antibody, comprising raising an antibody against a protein expressed by a nucleotide

sequence according to claim 10, wherein the nucleotide sequence is an mRNA sequence, wherein the antibody is directed against an epitope comprising at least a part of the amino acid sequence according to SEQ ID NO: 1 wherein the amino acid in position 4 of SEQ ID NO: 1 is selected from the group consisting of N, S, R, T and I, and wherein the amino acid in position 5 of SEQ ID NO: 1 is selected from the group consisting of R, V, L, F, M, I, H, S, T, A, P and G.

19. The nucleotide sequence of claim 10, wherein the nucleotide sequence is selected from the DNA sequences of any one of SEQ ID NO: 296 to 1205, except SEQ ID NO: 364, 568, 580, 637, 638, 647, 655, 662, 721, 1020, 1098, 1130, 1137, 1147 and 1150.

20. The nucleotide sequence of claim 10, wherein the nucleotide sequence is an mRNA sequence.

* * * * *