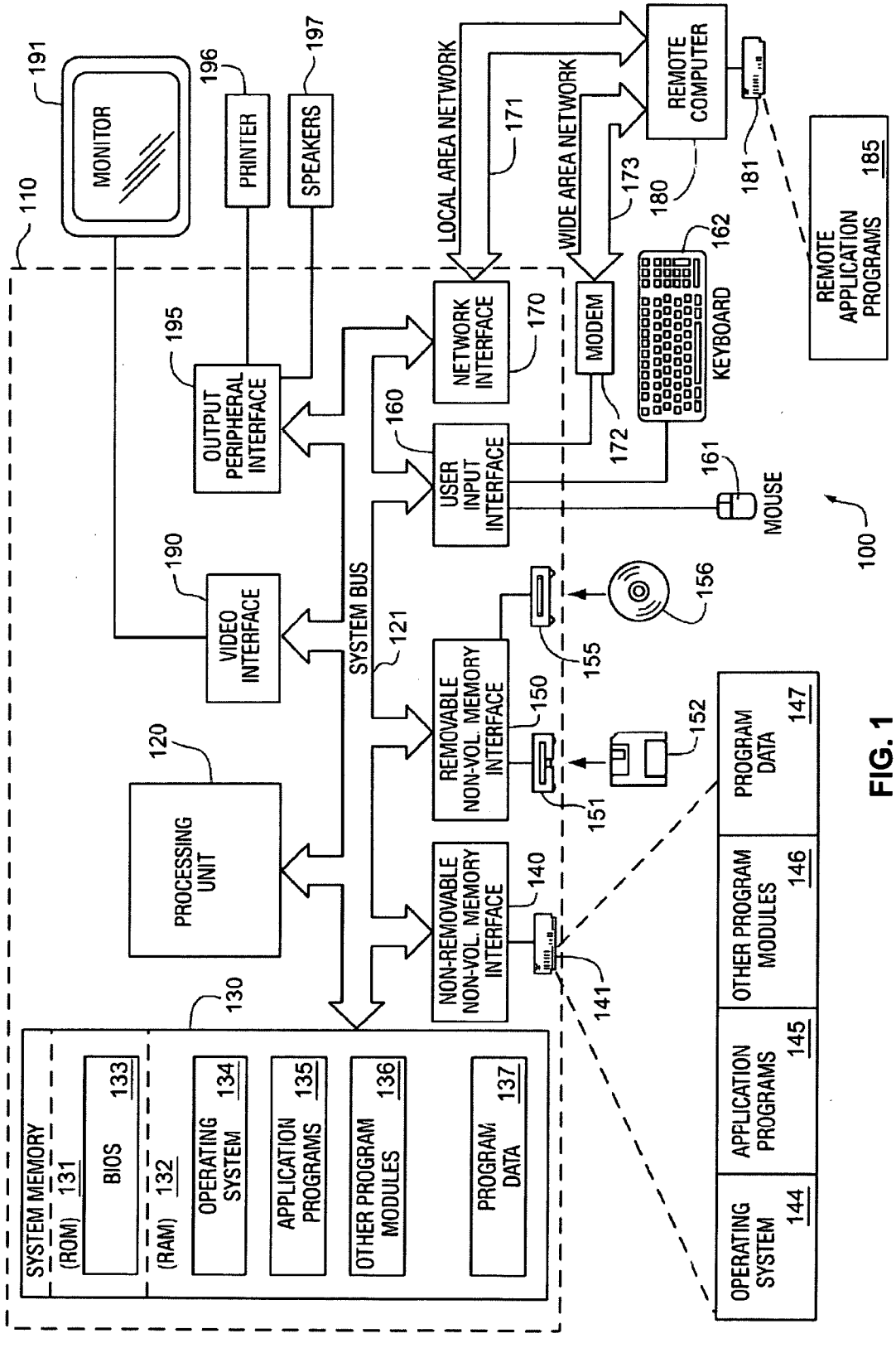
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PRINTER
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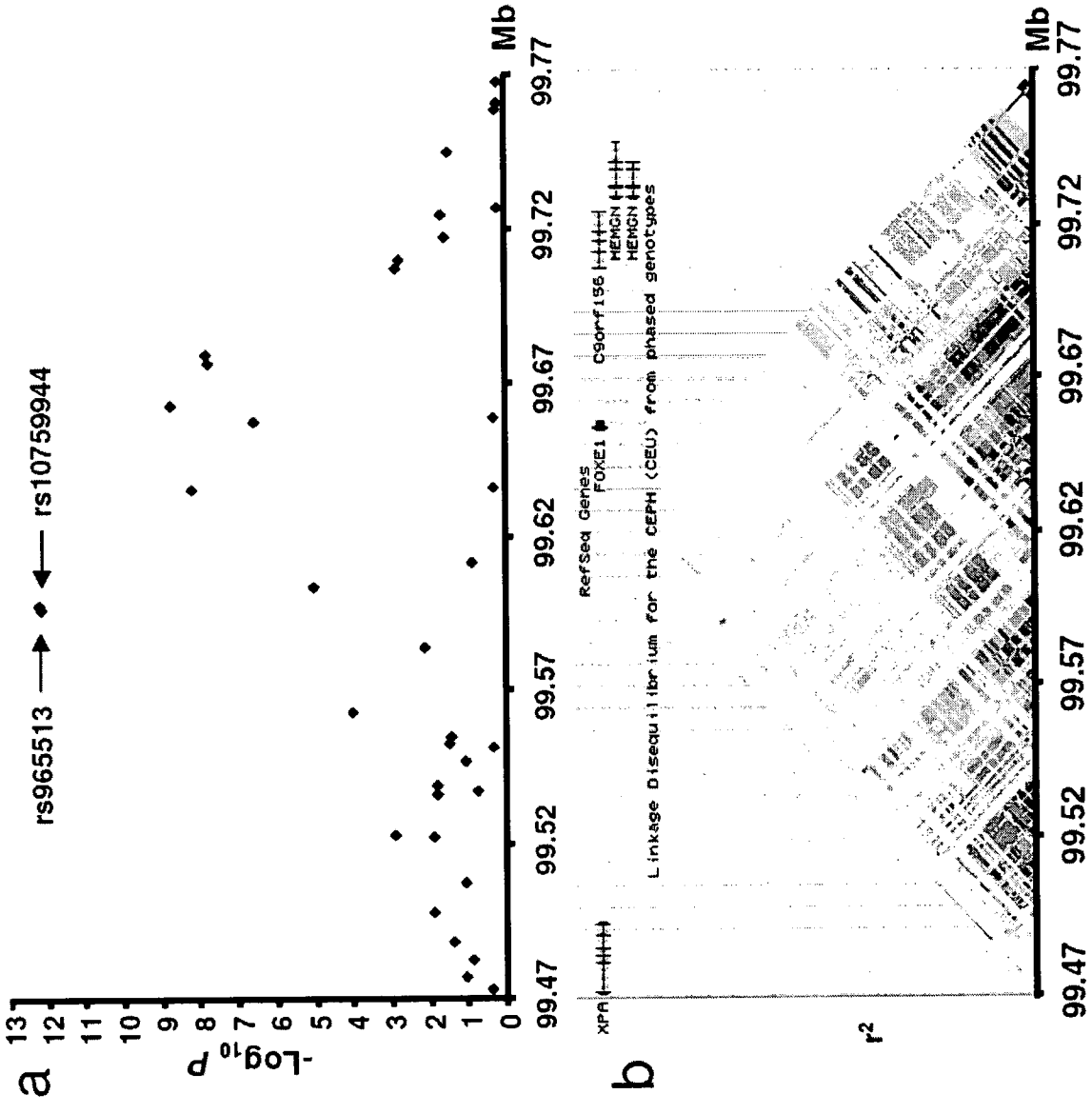
SPEAKERS
197
110
LOCAL AREA NETWORK
171
WIDE AREA NETWORK
173
REMOTE COMPUTER
180
181
REMOTE APPLICATION PROGRAMS
185
162
KEYBOARD
172
MODEM
NETWORK INTERFACE
170
OUTPUT PERIPHERAL INTERFACE
195
160
USER INPUT INTERFACE
161
MOUSE
100
190
VIDEO INTERFACE
SYSTEM BUS
121
156
155
REMOVABLE NON-VOL. MEMORY INTERFACE
150
151
152
120
PROCESSING UNIT
140
NON-REMOVABLE NON-VOL. MEMORY INTERFACE
141
130
SYSTEM MEMORY
(ROM) 131
BIOS 133
(RAM) 132
OPERATING SYSTEM 134
APPLICATION PROGRAMS 135
OTHER PROGRAM MODULES 136
PROGRAM DATA 137
OPERATING SYSTEM 144
APPLICATION PROGRAMS 145
OTHER PROGRAM MODULES 146
PROGRAM DATA 147

FIG. 1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99.52
99.57
99.62
99.67
99.72
99.77
Mb
b
RefSeq Genes
FOXE1
C9orf156
HEMGN
HEMGN
XPA
Linkage Disequilibrium for the CEPH (CEU) from phased genotypes
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99.72
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FIG. 2

SEQUENCE LISTING

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gctgagtgga taaataatta catccataca gtggaatatt attcagtgat aaaaagaaac 420
aagccatcaa gccatgaaaa cacatggagg atccttaaat ccatatcact aggtgaaaga 480
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<210> 21
<211> 599
<212> DNA
<213> Homo sapiens

<400> 21
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cagttaaatt atttaaaaac tcatccccac agagagttag gaaaatgaaa caagaatgac 180
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gcgagttttg tttattcaga attttcttat ttccatgtaa atcacattca ctgacatcar 300
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gctcctggac ttcacagtct gttattaaga gctgccattt agtagagctt cctatgtcac 420
agagtgtgct aagagcctca tatctgatat ctaattaaat cctcctgata catattatca 480
cctccttttg ttggtaagga aatgaaagtc cagagagatt aatttatcat ggttacccag 540
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<210> 22
<211> 599
<212> DNA
<213> Homo sapiens

<400> 22
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cgggttctgt taggaaggaa caaaaggaaa acggcactgg caggtagccc acgatgtgca 240
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aaggttctct ggactgctgt catgggatgg actaaagtga ggtggtgctg aatgcaggaa 480
gtcagtccag ctgtcagccc agcaccagta aaatcagcag acaccccagc ccaggaatgc 540
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<210> 23
<211> 599
<212> DNA
<213> Homo sapiens

<400> 23
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tgtatatgca cgcttgtgga atgcattttg gagtactcaa aacaacacag aagcagggct 180
caaaagattg gaaaatttaa taggaaatgc taatgtcagt gtgtattgta tcatagaagg 240
atttcaaaaa gagcagtgcc acatagaaaa tgaatgtgaa tgtattttcc aaggagatcy 300
gtgtccaaaa aaataataag cagctattta tcatgatgca agacttcaaa acatagttaa 360
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cctataatac acttttcaat atgtcaaatt ttctttttag tttttaaatc ttttggggtt 480
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catctttgca tcatttccaa tacttgtagt ataaattgta tagaggcttt cagagttct 599

<210> 24
<211> 599
<212> DNA
<213> Homo sapiens

<400> 24
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taataataaa aattagaaac aaatgtctgt tttaagctgg gtttccccca gaagttgacc 180
ctgagacaag gttatggatg caagtagttt attttagaag tgaccctagg aagcaccagt 240
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<210> 25
<211> 599
<212> DNA
<213> Homo sapiens
<220>
<221> variant
<222> 300
<223> a,c,g or t (any base)

<400> 25
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gaaaactcta taagaccaac aatccagctt cttcaacaaa taaattccag agaaaataaa 180
agatggagca atactttatg tattaagtga gataagacta ctgaaagcca acccaaaaca 240
aaatgtagaa acaaaaacaa ataaattcat gaaatgaatg aatgagttgg aaatttaaan 300
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tttacagatg aatttaaatg acgtctggga tttgtttcaa aataatatga gcacagggga 480
cgatgggggc acagatggta ccaaattgga caggattgat ggctgttagg gctgggtaat 540
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<210> 26
<211> 599

<212> DNA
<213> Homo sapiens

<400> 26
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ggcacatagc aagtgttcaa aatacagtac ctattattat tataggcatt tacattttag 180
taaagcaata agtgtgtctc caagtcaatg aattccatct cggtgtgtga aagttgtagc 240
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agcaaaaagt tgagtagtgt taaatgtttt gatttccaaa ataataaaag aaaatgtatc 360
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ggcaaagaga tgaaaatagt ggagaaaatg taagaaaaat aaggacgaat tcagtaaatt 480
tgactaatag tacttccaga cagtgaaaaa aagaaggtga aaaattattt tctttaaaaa 540
gagattgatt tctccagaac ccaagggcat aagtctccag aatgaaagaa tccttgaga 599

<210> 27
<211> 599
<212> DNA
<213> Homo sapiens

<400> 27
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ggtgcatgcc actgtgccca gctctatgtt taatcttttg agaaaccacc aaactttccc 180
atagttactg caccattttg cattcccacc agcaatgcat gaggattcca gtttctccac 240
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ctaataatgt tgagcatttt ttcatgtgct taggggccat ttgtatattt tctttggaaa 420
aatgtctatt cgagtccttt gcccattttt gaatteagtt gttttattgt tactgagttt 480
tagatgttct ttatgtattt tgaatattaa ttccttatca ggtatatgct ttacaaatat 540
tttctctcat ttactaggtc atcttttca ctttttgata gtattctttg atgcacaga 599

<210> 28
<211> 599
<212> DNA
<213> Homo sapiens

<400> 28
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gccaaagagt aaggcccaaa gacctgagtt tccttctcag cccaaggctt ttctctctac 180
aagtcccttc cacaatccag gcccagtctc cttccagctt gaatttccat ggtttcttta 240
atagaagaac tggttacctc tgcgtctgca tgcaggggaa tctccgtcaa ggaatctggw 300
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ccccctatgc acataaaatg gcctgctgca ggctggcttc tccaggggtg ctgggaatac 480
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<210> 29
<211> 599
<212> DNA
<213> Homo sapiens

<400> 29
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gaagggagag gggctttaca ctcgctaaac aaaactcctg gtttccttct tcccaagtaa 120
tggagaagca aaaaacccag atttcgtcct gtttcgtttt tacaaaggag gaaaaacttc 180
aaattttaaa atttttaact ggattatatt ataggcacct tttaatacgg gatttcgtgg 240
ctctcagtaa ctttcaagat tctgagattc agatatctag attttaaatt ctggacgacs 300
gttgtcctaa cgtgattcca taaatctaaa gaatgcgatc ctgcgatcct gcgaccctgt 360
aattctaaga ttccaagact gggagtctaa ctttgactat gcttatattc ctttgactta 420
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tggcgggagc ctgtagtccc agctactgga ggttaaggca ggaagatcgc ttgagcccag 540
gagttccagg ctgtagtgca caatcattgt gcctgtgagt agccacagca ctccagcct 599

<210> 30
<211> 599
<212> DNA
<213> Homo sapiens

<400> 30
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gttcgtgtcc gccatgtgag ccagcgtagg gacgaaaact catagacaca tcggctgttc 180
acacgttccc cgcaatctga gaacgaacag gaatggagag aggactcaac tgggacccac 240
gtggaaaaga ccgagcaggc cacagaggct cggtctcccc gcgcacagcg taggcaccck 300
gtgtactctg taaacgggag gaggtggggc gaggcagcca gagcccttgg actggcacag 360
ggaccctcga tggagcgaag ccctcaaacg ggatgctttc tggtattcta tcggggaggg 420
tccttggcgg taaccagagg gcagcgtagt gtcaacacca gagaccagga tccaaattgt 480
ggggaatcag tttcagcctt ccatgtgctg ccggaactcg ggcctttta cgcggttcgt 540
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<210> 31
<211> 599
<212> DNA
<213> Homo sapiens

<400> 31
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ttttcttttc ggatagctct ggctagaatt tccagtacaa tgttggacag cataaagcaa 180
acattcttct cttgttcctg ttattaggaa gaaagctttc agtttttcac cactgagtat 240
gatgttaact gtgaactttt aaataaatac gccttatcat tttgaggaat tttctctctr 300
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gatggattga ttttcttatg ttgaaccatc cttgcattcc tgagataaat ctcacttgat 480
catgttgaaa atcctttaa tttgctctag gattttatct attaatattt tgttgagaat 540
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<210> 32
<211> 599
<212> DNA
<213> Homo sapiens

<400> 32
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cttctcttgt tcctgttatt aggaagaaag ctttcagttt ttcaccactg agtatgatgt 180
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tgaaaatcct tttaatttgc tctaggattt tatctattaa tattttgttg agaatttttg 480
catctatatt caaaaggaat atttgtctgt aatttttctta taatgtctat ctagctttgg 540
tatcagagaa atattgccct catggaatga attaggaagt gttccctctt cttcaattt 599

<210> 33
<211> 599
<212> DNA
<213> Homo sapiens

<400> 33
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gtgtttgaac actgtttgag tgagaggcgg tgtttcttaa cattctcttc ttctgcatat 120
ccagaacaaa taatacaaag ggaatctaga aactacctaa ccccatagcc agatcattct 180

gacaatgcta tagaaaaatt aggtaggata tgccatatta taaagtaggg ccatgagttc 240
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tcatacctga ctttgccctg ctcagggtgt ctgaattgcc catgagcttc acacttttg 480
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<210> 34
<211> 599
<212> DNA
<213> Homo sapiens

<400> 34
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tccgattggc tgggtgtcca ctccgactgg ttggtgcgtg tgctgaacta gccaaaaagt 480
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<210> 35
<211> 599
<212> DNA
<213> Homo sapiens

<400> 35
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<210> 36
<211> 599
<212> DNA
<213> Homo sapiens

<400> 36
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aaatgtagga caatgagatg aagatgtcca ataaactgtt agctatatga gtctgttgct 180
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<210> 37
<211> 599
<212> DNA
<213> Homo sapiens

<400> 37
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<210> 38
<211> 599
<212> DNA
<213> Homo sapiens

<400> 38
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agtttcttag atataatacc aaaaacaaag cacagtaaca aaagaaaaaa cagataactg 180
gactttatca aaactaaaaa ctttgcatgt gaaaggacac tgtcaagaaa gtagaaagac 240
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<210> 39
<211> 599
<212> DNA
<213> Homo sapiens

<400> 39
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<210> 40
<211> 599
<212> DNA
<213> Homo sapiens

<400> 40
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<210> 41
<211> 599
<212> DNA
<213> Homo sapiens

<400> 41
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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<210> 46
<211> 599
<212> DNA
<213> Homo sapiens

<400> 46
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<210> 47
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<213> Homo sapiens

<400> 47
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<210> 48
<211> 599
<212> DNA
<213> Homo sapiens

<400> 48

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<210> 49
<211> 599
<212> DNA
<213> Homo sapiens

<400> 49
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<212> DNA
<213> Homo sapiens

<400> 50
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<212> DNA
<213> Homo sapiens

<400> 51
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<210> 52

<211> 599
<212> DNA
<213> Homo sapiens

<400> 52
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<211> 599
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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 58
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<212> DNA
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<210> 59
<211> 599
<212> DNA
<213> Homo sapiens

<400> 59
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<210> 60
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<213> Homo sapiens

<400> 60
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<210> 61
<211> 599
<212> DNA
<213> Homo sapiens

<400> 61
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<210> 62
<211> 599
<212> DNA
<213> Homo sapiens

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<210> 63
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<213> Homo sapiens

<400> 63
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<213> Homo sapiens

<400> 64
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<210> 65
<211> 599
<212> DNA
<213> Homo sapiens

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<210> 66
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<212> DNA
<213> Homo sapiens

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<210> 67
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<212> DNA
<213> Homo sapiens

<400> 67
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<210> 68
<211> 599
<212> DNA
<213> Homo sapiens

<400> 68
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<210> 69
<211> 599
<212> DNA
<213> Homo sapiens

<400> 69
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<210> 70
<211> 599
<212> DNA
<213> Homo sapiens

<400> 70
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<210> 71
<211> 599
<212> DNA
<213> Homo sapiens

<400> 71
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<210> 72
<211> 599
<212> DNA
<213> Homo sapiens

<400> 72
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<210> 73
<211> 599
<212> DNA
<213> Homo sapiens

<400> 73
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<210> 74
<211> 599
<212> DNA
<213> Homo sapiens

<400> 74
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<210> 75
<211> 599
<212> DNA
<213> Homo sapiens

<400> 75
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<210> 76
<211> 599
<212> DNA
<213> Homo sapiens

<400> 76
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<210> 77
<211> 599
<212> DNA
<213> Homo sapiens

<400> 77
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<210> 78
<211> 599
<212> DNA
<213> Homo sapiens

<400> 78
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<210> 79
<211> 599
<212> DNA
<213> Homo sapiens

<400> 79
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<210> 80
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<212> DNA
<213> Homo sapiens

<400> 80
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<210> 81
<211> 599
<212> DNA
<213> Homo sapiens

<400> 81
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<210> 82
<211> 599
<212> DNA
<213> Homo sapiens

<400> 82
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<210> 83
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<212> DNA
<213> Homo sapiens

<400> 83
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<210> 84
<211> 599
<212> DNA
<213> Homo sapiens

<400> 84
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<213> Homo sapiens

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<210> 86
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<212> DNA
<213> Homo sapiens

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<210> 87
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<212> DNA
<213> Homo sapiens

<400> 87
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<210> 88
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<400> 88
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<210> 89
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<212> DNA
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<213> Homo sapiens

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<210> 91
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<210> 92
<211> 599
<212> DNA
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<400> 92
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<210> 93
<211> 599
<212> DNA
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<212> DNA
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<210> 98
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<212> DNA
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<213> Homo sapiens

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<213> Homo sapiens

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<210> 101
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<213> Homo sapiens

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<210> 102
<211> 599
<212> DNA
<213> Homo sapiens

<400> 102
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<210> 103
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<212> DNA
<213> Homo sapiens

<400> 103
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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

<400> 111

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

<400> 150
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<210> 151
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<212> DNA
<213> Homo sapiens

<400> 151
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<210> 152
<211> 599

<212> DNA
<213> Homo sapiens

<400> 152
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<210> 153
<211> 599
<212> DNA
<213> Homo sapiens

<400> 153
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<210> 154
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<212> DNA
<213> Homo sapiens

<400> 154
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<212> DNA
<213> Homo sapiens

<400> 155
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<210> 156
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

<400> 166
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<212> DNA
<213> Homo sapiens

<400> 167
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<210> 168
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<212> DNA
<213> Homo sapiens

<400> 168
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<212> DNA
<213> Homo sapiens

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<210> 171
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<212> DNA
<213> Homo sapiens

<400> 171
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gcatttcaga ggccataact aattatacca ccttaagccc tgataccaat gggggcagaa 360
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<210> 172
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<212> DNA
<213> Homo sapiens

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agtcactcac atctatttaa gcttctgcta tcaaaaatgg aaaagcagcc agtgacttct 180
gctttaaccg aggctgtctt gtatttttg taaacttttt tctattttta aatttttatc 240
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<213> Homo sapiens

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<210> 174
<211> 599
<212> DNA
<213> Homo sapiens

<400> 174

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<210> 175
<211> 599
<212> DNA
<213> Homo sapiens

<400> 175
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tgtacctctt gggttacttt gtctaatcac ttcatcaatt tgggtcttaa cttcctcacc 180
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gttctgtgtt gcagcctggg caactacctc tccatggctg catcttaatt ggggtcccca 480
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<210> 176
<211> 599
<212> DNA
<213> Homo sapiens

<400> 176
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gctcctgtta ttggtaatga ctgcagatgc tgagaatcag gctttgtgat ctgtgctgtc 180
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<210> 177
<211> 599
<212> DNA
<213> Homo sapiens

<400> 177
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tgtcatttgc tgtgggattt tggggaaatt actgaatatc gtagaatctc agtttttgtt 180
tttttttca tttgaaaact caaggatagt atctaccttа tagggttgaa atagggatta 240
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agactatata atcccatctc tctaacttag cactgatgag tctcaatctg attttaggtc 360
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gcacataaat ctcattttat ttcacagata cagcttagca aaaatttaat aagcaagttg 480
atataagaaa aacgttgaat cagtaatact acaagttgtg aatcaggttc actgtgtact 540
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<210> 178

<211> 599
<212> DNA
<213> Homo sapiens

<400> 178
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cagacagaag acacatagaa gagaaggtga tatgaagaca gaggcagaga ttggagtgat 180
gcagccgcaa gcaacggaat actggcagca accagaatct ggaagaggca aggaatggat 240
tctcctgctg gagcctccgg aggaagtaca gccctgctgg caccttgatt tgggacttcy 300
gtcctccaga aaagagagaa tacatttctg tagtttcaag ccaccaagtt tgtggtaaag 360
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tgtcatagtt gctcttgatg gctggaatgg tctgtttggg gctttgatat ggtttggctc 480
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<210> 179
<211> 599
<212> DNA
<213> Homo sapiens

<400> 179
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ccctgagccc ctgggtgaca gtttcccatg gctctgacaa ggtgctagaa gtgagctggc 240
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ctggagcagg aaagtcatgt agggactggg aacttgttct aaccctccca ttgttggggg 480
gatgccttag acctgggagg acagggtctt gtccaaggtc acacagtgca acaggagtgg 540
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<210> 180
<211> 599
<212> DNA
<213> Homo sapiens

<400> 180
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ccaaagtgct gggattacag gcatgaacca tcgcacccag ccctacctga tcaactcttt 180
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atcagagaat attttaggaa aataaaaacc atcgataacc ctacatgcct agataatcct 360
tactaacatt ttggtataca caaccttcca tgtttataca tgcacttctg gttttgtcat 420
gaacatgcat tctatattct ccaaatatct actgagggtc tactacatgc taagctctgt 480
tccagcactg agaatacatc aattaagacc aaaattcctg tcctcatgaa gcttataaat 540
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<210> 181
<211> 599
<212> DNA
<213> Homo sapiens

<400> 181
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catggctatg tggaaggcac tcttttaaag ggttcttttc atctgcagac gaaagactct 180
ttgaggtgct caatgtcaca gccagttgct ttaaaataga agctgtctgg tgataaattt 240
catcagcatg ttgtgttgcc acatgtctat ggatgctggt ttggtctgtg aatagctgcy 300
gacagcattt ccacaatttt tctttacatt caaaactcct ttttgttgga acttctttgg 360
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cttaggttta tggctaatag aagtctcact aagattcttt agattatctt tccacagggg 480
cttctagttt tatgttccat tatgttatac aattctctga gaagtaacac ttctcttatt 540
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<210> 182
<211> 599
<212> DNA
<213> Homo sapiens

<400> 182
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tgttcaatat caaaatagat gagccaaaaa gaagggaaca gtgtgcttaa ggtttaaaaa 180
cgtaatgttg aagttgttgg ttttagttac tttacttttc tattttacag ggttggtttt 240
tgttttccat tttgtgggtc taaaatttct tgtaaggcta taagatgtac agtgtacccr 300
tataaaatta ggattgactt atagagggga aatttatttg gtttattaag atcctttcag 360
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gccttgggaa ctaccataga tacgttttct tcagggtaca ttgagcgaat tccccaaatt 540
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<210> 183
<211> 599
<212> DNA
<213> Homo sapiens

<400> 183
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aggctgaggc aggcagatta cttgaggtca ggagttcaag accagcctgg ccaacacggt 540
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<210> 184
<211> 599
<212> DNA
<213> Homo sapiens

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aaaaaataaa aaagtacatg gacctggcag aaatagaggt ccatgtgggg agaagtgaaa 180
aataacaaag taggaacaat ggttatgaag gccttgaatg ttaggcggag ttattcctat 240
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cacctacgcc tgaatttggg ctccaccact caaaagcaat ctcattctag cttgacctct 480
tggaagtcat ttcctcattg tagttttgat aatcatatct attcttcaga gttgacataa 540
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<210> 185
<211> 599
<212> DNA
<213> Homo sapiens

<400> 185
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aaggttctcc agggtcacca tgtactgctg gattatttgg tgatgctgtg gacacacaaa 180
agggggtagt taggtcagga aaaagcatat aagcaatctt gtggaacatt tccttcagca 240
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<210> 186
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<212> DNA
<213> Homo sapiens

<400> 186
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<210> 187
<211> 599
<212> DNA
<213> Homo sapiens

<400> 187
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<210> 188
<211> 599
<212> DNA
<213> Homo sapiens

<400> 188
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<210> 189
<211> 599
<212> DNA

<213> Homo sapiens

<400> 189
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<210> 190
<211> 599
<212> DNA
<213> Homo sapiens

<400> 190
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<210> 191
<211> 599
<212> DNA
<213> Homo sapiens

<400> 191
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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
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<212> DNA
<213> Homo sapiens

<400> 212
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<213> Homo sapiens

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<210> 214
<211> 599
<212> DNA
<213> Homo sapiens

<400> 214
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<210> 215
<211> 599

<212> DNA
<213> Homo sapiens

<400> 215
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<210> 216
<211> 599
<212> DNA
<213> Homo sapiens

<400> 216
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<210> 217
<211> 599
<212> DNA
<213> Homo sapiens

<400> 217
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<210> 218
<211> 599
<212> DNA
<213> Homo sapiens

<400> 218
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<210> 219
<211> 599
<212> DNA
<213> Homo sapiens

<400> 219
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<210> 220
<211> 599
<212> DNA
<213> Homo sapiens

<400> 220
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<210> 221
<211> 599
<212> DNA
<213> Homo sapiens

<400> 221
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<210> 222
<211> 599
<212> DNA
<213> Homo sapiens

<400> 222
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caagatggca ccactgaatc ccagcctgtg caacagagtg agactctgtc tcaaaaaaaa 180

aaaaaaagtg ttgggactac aggcatgagc acctgcacct ggccagtcct tttaaatact 240
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<210> 223
<211> 599
<212> DNA
<213> Homo sapiens

<400> 223
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gccacacttt atattttatt atatttcatc ctctagtgtt tcatgtctgt gccctaacta 240
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<210> 224
<211> 599
<212> DNA
<213> Homo sapiens

<400> 224
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<210> 225
<211> 599
<212> DNA
<213> Homo sapiens

<400> 225
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<210> 226
<211> 599
<212> DNA
<213> Homo sapiens

<400> 226
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<210> 227
<211> 599
<212> DNA
<213> Homo sapiens

<400> 227
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<210> 228
<211> 599
<212> DNA
<213> Homo sapiens

<400> 228
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<210> 229
<211> 599
<212> DNA
<213> Homo sapiens

<400> 229
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