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<110> deCODE Genetics ehf

<120> GENETIC VARIANTS USEFUL FOR RISK ASSESSMENT OF THYROID CANCER

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<160> 229

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<212> DNA

<213> Homo sapiens

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 <213> Homo sapiens

<400> 21
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 gogagttttg tttattcaga attttcttat ttccatgtaa atcacattca ctgacatcar 300
 tctggcttag attctatgtc ttcttgtcct ttggttaaaa aaaaatactg tagttagtaa 360
 gctcctggac ttccagtcct gttattaaga gctgccattt agtagagctt cctatgtcac 420
 agagtgtgct aagagcctca tatctgatat ctaattaaat cctcctgata catattatca 480
 cctccttttg ttggtaagga aatgaaagtc cagagagatt aatttatcat ggttaccag 540
 gaaatgagca gtgaggctgg ggttcgaacc cagggttgat cttttcacac tccatttct 599

<210> 22
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 22
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 gaccccoagg ggtagctggc tgtgtctgta agtgtatgat ggggttaoct caatcacact 180
 cgggttctgt taggaaggaa caaaaggaaa acggcactgg caggtagccc acgatgtgca 240
 ctgcactacg tccaatgatt accttggcca aagctttcct taaacttggg coacatcaar 300

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caaggcatga	gtcaggacta	agttttcggt	cagaagggtg	aagaaaagaa	gggtgtgtt	599

<210> 23
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 23						
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gtgtccaaaa	aaataataag	cagctattta	tcatgatgca	agacttcaaa	acatagttaa	360
taatcatgaa	aatcagctag	ctcttatgga	ctatctctgt	gcaattgccc	ataatctatc	420
cctataatac	acttttcaat	atgtcaaatt	ttcttttttag	tttttaaata	ttttgggggtt	480
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catctttgca	tcattttccaa	tactttagt	ataaattgta	tagaggcttt	cagagttct	599

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

<400> 24						
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taataataaa	aattagaaac	aaatgtctgt	tttaagctgg	gtttcccca	gaagttgacc	180
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agggggataa	ggcagtggtt	caggcaagga	aagaaaccct	gtaaagggtg	agttatcaar	300
ccggtttcca	ccatgggcaa	ctggggctca	gtcccacagg	ggaaacctca	gagacactgc	360
aaatcatacc	tcagaatgac	cccacctgac	aagttaggaa	gctggagtat	ttacccatca	420
actctatatc	tgtcatcatt	ttctgtgact	cctgggggca	ttaaacttcct	agaactttca	480
ttttgttcca	catgcaggct	aagtatacto	tcatagatag	aagaaagtcc	tcaggaaagt	540
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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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agatggagca	atactttatg	tattaagtga	gataagacta	ctgaaagcca	acccaaaaca	240
aaatgtagaa	acaaaaacaa	ataaattcat	gaaatgaatg	aatgagttgg	aaattttaan	300
cttgactttt	aacaagtcac	caagttgecc	ttgatgatat	taaagactta	ttgttaattt	360
ttggggagta	caacaacagt	attgggggtt	tgatatcttt	tagagatata	cactgaaata	420
tttacagatg	aattttaaatg	acgtctggga	tttgtttcaa	aataatatga	gcacagggga	480
cgatgggggc	acagatggta	ccaaatttga	caggattgat	ggctgttagg	gctgggtaat	540
gagtacaaaag	ggatacatca	tactatttgt	tttgtatatg	ctttaaattc	caattttttt	599

<210> 26
 <211> 599

<212> DNA
<213> Homo sapiens

<400> 26
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ccacagaattt gtttttaagga ttaaatacat taagccatgt gaaacaotta gaacaggggtt 120
ggcacatagc aagtgttcaa aatacagtac ctattattat tataggcatt tacatttttag 180
taaagcaata agtgtgtctc caagtcaatg aattccatct cgggtgtgtga aagtgttagc 240
tgcaatatcg aaagtactcc ctgtaatctt tgagaacaac tcgcagagaa aaggaaaagy 300
agcaaaaagt tgagttagtgt taaatgtttt gatttccaaa ataataaaaag aaaatgtatc 360
tgaaagactg cacttatcct cttatcaaca aggcagtctg tccgaaaata gaaaacaaat 420
ggcaaaagaga tgaaaatagt ggagaaaatg taagaaaaat aaggacgaat toagtaaatt 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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gggtgcattgc actgtgccc cgtctatgtt taatcttttg agaaaccacc aaactttccc 180
atagttactg caccattttg cattcccacc agcaatgcat gaggattcca gtttctcoac 240
atcctacca gcaactgtta ttttctgggg ttttgtttgt ttgtttctgt tttcttatar 300
tcctctgggt aagtgtgcag aggtatctca ttgtggttat gatttgcatt tccctagtga 360
ctaataatgt tgagcatttt ttcattgtgt tagggggccat ttgtatatatt tctttggaaa 420
aatgtctatt cgagtccttt gccattttt gaatttaagtt gttttattgt tactgagttt 480
tagatgttct ttatgtattt tgaatatata ttccattatca ggtatatgct ttacaaatat 540
tttctctcat ttactagggtc atctttttca ctttttgata gtattctctg atgcacaga 599

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

<400> 28
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gccaaagagt aaggcccaaa gacctgagtt tcttctctcag cccaaggctt ttctctctac 180
aagtcccttc cacaatccag gccagtcctc ctccagctt gaatttccat ggtttcttta 240
atagaagaac tggttacctc tgcgtctgca tgcaggggaa tctccgtcaa ggaatctggw 300
ggaattttcc ttgactcctt ggaccctctc cgtttttatt tacaaagtcg cccattcaaa 360
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ccccctatgc acataaaatg gcctgctgca ggctggettc tccaggggtg ctgggaatac 480
ttgaagggct gaagatcagt ggggaagcaga aatcactggc ctgccacat caacaccaac 540
ccaccctgc tggattggga gaatgatttc caagggctctg gaacctgccc ttccctaact 599

<210> 29
<211> 599
<212> DNA
<213> Homo sapiens

<400> 29
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gaagggagag gggctttaca ctgcctaaac aaaactcctg gtttccctct tcccaagtaa 120
tggaagaagca aaaaaccag atttcgtcct gtttcgtttt tacaaaggag gaaaaacttc 180
aaattttaaa atttttaact ggattatatt ataggcaact ttaatacgg gatttctgtg 240
ctctcagtaa ctttcaagat tctgagattc agatatctag attttaaat ctggacgacs 300
gttgtcctaa cgtgattcca taaatctaaa gaatgogac ctgogatcct gcgacctgt 360
aattctaaga ttccaagact gggagtctaa ctttgactat gcttatattc ctttgactta 420
agcttctagt caaagtctaa aaacctatgt attaagatac tgggactaaa ccaggcacgg 480

tgccggggagc	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
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gtggaaaaga	ccgagcaggc	cacagaggct	oggtctcccc	gcgcacagcg	taggcacccck	300
gtgtactctg	taaacgggag	gagggtggggc	gaggcagcca	gagcccttgg	actggcacag	360
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tccttggcgg	taaccagagg	gcagcgtagt	gtcaacacca	gagaccagga	tccaaattgt	480
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<210> 31
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 31						
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ttttcttttc	ggatagctct	ggctagaatt	tcagtagcaa	tggtggacag	cataaagcaa	180
acattcttct	cttgttcctg	ttattaggaa	gaaagctttc	agttttttcac	oactgagtat	240
gatgttaact	gtgaactttt	aaataaatac	gccttatcat	tttgagggaat	tttctctctr	300
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acatcccttt	ctgcattgag	atgatcatgc	agtttcttcc	cctcttcatt	gtataaaagt	420
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catgttgaaa	atccttttaa	tttgctctag	gatttttatc	attaatattt	tggtgagaat	540
ttttgcactc	atattcaaaa	ggaatatttg	tcgtgaattt	tcttataatg	tctatctag	599

<210> 32
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 32						
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cttctcttgt	tcctgttatt	aggaagaaaag	ctttcagttt	ttcaccactg	agtatgatgt	180
taactgtgaa	cttttaaaata	aatacgcctt	atcattttga	ggaattttct	ctctgttccct	240
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catctatatt	caaaagggaat	atttgtctgt	aattttctta	taatgtctat	ctagcttttg	540
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<210> 33
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 33						
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ccagaacaaa	taatacaaaag	ggaatctaga	aactacctaa	ccccatagcc	agatcattct	180

gacaatgcta	tagaaaaatt	aggtaggata	tgccatatta	taaagtaggg	ccatgagttc	240
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ataaacttca	tttgttagcag	cattaaaaaga	aatagagtgc	ccagagtggg	gaggcaatgg	420
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atgggcattg	attaactgga	ctatgtcata	gaagacaaac	ggaatggcgc	agtggctgca	540
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<210> 34
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 34						
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ggtacottat	gtgatttgag	gcagggccag	ctagccgtcc	accaggatgg	gtgcatctgr	300
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cccctttgca	ctaagtcagg	tacagtacag	tgtttcctgt	tggtgacagc	tgccatttgt	420
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attttttctt	tttttggttt	taaggagcaa	aaagtttaat	aggcaagaaa	gaaggaaaga	540
aaaagagacc	agctccctca	tacaaagaca	agggaggagg	acttgaaca	aagagaac	599

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

<400> 35						
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ggcctcacgg	aggagggtgg	atcttcagac	agagccagggt	ggacagaggg	attcaggctg	240
aaggagtagc	acagagatca	gcaaggagaa	tggtctagtg	cgtggcacac	atagtactgr	300
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aaaagtacaa	aatttttcac	aaactgaccg	catctacgta	atagcactca	gattaaaaca	540
ataacaaatt	attactaaaa	ctccagagat	ccactctggc	ctctttcagg	aactactta	599

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

<400> 36						
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aaatgtagga	caatgagatg	aagatgtcca	ataaactggt	agctatatga	gtctgttgct	180
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caacagcctg	ggtctatctc	accagccaca	cagttttctc	ctgaatgaac	ttgcatcact	480
aaactcagaa	gctgtgttgc	gaaatccgca	tcagattggg	tacctctggg	ggcgtccrag	540
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<210> 37
 <211> 599
 <212> DNA
 <213> Homo sapiens

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<400> 37
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ggaagaacaa gagacaacat cgcttcocctc tgaaatgctg gcacgggctg cgaagcatga 180
gtcagaccct tctagcccca gcagcagcct caacagcctg ggtctatctc accagccaca 240
cagttttctc ctgaatgaac ttgcatcact aacctcagaa gctgtgttgc gaaatccgcm 300
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cccaggcagg gaactcataa cttcccaagg catcccatct ccttggtgag caagtgaaga 480
tctaagaaaa ccttttcttg caatctcagc atactgaaaa gtcaaagaaa aagataacgc 540
tataatttaa tggtaatgat ccaggacaga gtgaaatgca aggactctgc atcctggaa 599

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

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<400> 38
acacaccata tgctaaaact aactcaaaat ggaataaaga ccttaatggt tatagacaat 60
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agtctcttag atataatacc aaaaacaaaag cacagtaaca aaagaaaaaa cagataactg 180
gactttatca aaactaaaaa ctttgcctgt gaaaggacac tgtcaagaaa gtagaaagac 240
aaagaatgag aggaaatatg tgcaaatcat gtatctgata aagggtctaat agccagaatr 300
tacaatattt taaactctca caactcaaca ataaaaaaat ttgaaaatta gtaaagtact 360
tcaatagaca tttgtccaaa gaagatatat aaatggccaa taagaaatga aaagatgttc 420
attattagtc tttaggaaaac tagaagtcaa aaccacaatg agaatttgga atctttgtgc 480
attgctgtag taatgtaaaa tggtagagcc actgtggaaa acagtttggc aatttctcaa 540
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<210> 39
<211> 599
<212> DNA
<213> Homo sapiens

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<400> 39
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tgatctccga ggcccttgc t acgtatagga ttccgggcct tggcgccgggt tccagtggct 180
ccagcccgga cgcagcttct cgggggtggg ggggggggcg ggcgggggct gtgggtgcag 240
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gtaacgggtg gcatgccttc cagggtttta gtgcgcttct tctggtgggt gagctgaggg 360
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tccttgctcc gtcgacccgg tgtgtggaaa cgtcacaagc gtttgcttga caaccttctg 480
cggcagaggg ttggtcgaac gaaggagag gggctttaca ctgcgtaaac aaaactcctg 540
gtttccttct tcccaagtaa tggagaagca aaaaaccag atttcgtcct gtttcgttt 599

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

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<400> 40
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tgaggccggg agagttcagg aaccggctcg ggagacctca gcgccgaac tcggagtttt 180
cggacttttc aggcctctgc caagggtctg gactcgcagg tgaaaggacg ggctcatctc 240
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<210> 41
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 41
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<210> 42
 <211> 599
 <212> DNA
 <213> Homo sapiens

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<210> 43
 <211> 599
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 <213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

<400> 44
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 <211> 599
 <212> DNA
 <213> Homo sapiens

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

<400> 46						
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<210> 47
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 47						
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gaccccttcc	agttggccat	tgtgtcctga	acagaaagct	taatttttct	cctaaacctt	540
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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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<210> 50
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 50						
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<210> 51
 <211> 599
 <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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 <212> DNA
 <213> Homo sapiens

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 aatgtgaaag aaagccccag catgaggaat aagggaagtt ccacaatgcc catggtgtg 599

<210> 54
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 54
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<210> 55
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 55
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<210> 56
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 56						
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<210> 57
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 57						
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<210> 58
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 <212> DNA
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<400> 58						
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 <212> DNA
 <213> Homo sapiens

<400> 59						
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<213> Homo sapiens

<400> 63

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tctccgtaat	gatcaaatag	ttttccaaac	cctgtccatg	tcaagtgatc	tttaagggaac	540
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<210> 64

<211> 599

<212> DNA

<213> Homo sapiens

<400> 64

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aaataaatgt	aacatatatg	ctaatagaat	actaagcaac	attttacatg	atgctcttaa	180
aaaatattta	actacataga	aagtcattta	tacatatatt	taaagcaaat	tatgaaggat	240
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aaggagtttt	tgacagaagg	taagtatcag	agaggatagt	ccaagtgagt	gcttcttaac	360
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tgagtctcgc	tctgtcatca	ggctgatgta	cactggcaca	atctcagctc	actgcaacct	480
ccacctcccg	gggtcccagtt	caagcaattc	tcctgcctca	gcctcccag	tagctggagg	540
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<210> 65

<211> 599

<212> DNA

<213> Homo sapiens

<400> 65

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aaactcttca	ggtgatattc	atgtatttcc	aggtgatatt	aatgtgcagg	actgagaaac	180
aattatctag	atttacaaa	agaagcatag	aaagatgggt	ggagaataga	aatgtgatag	240
agatgtaata	gatatatgat	tgatggacag	atgaaagatt	tttaataggt	agatagatay	300
gtagggtgaca	catggataga	tgatagattt	ttgaaacatg	atggatgaga	cagaaatatg	360
gatagataga	tagataaatg	gtaattaa	agataaacag	tagacctgaa	gatctgaagg	420
aaggggaagag	aaaaaagagg	aaaaagggat	gggaaaagaa	ggaatggaat	ttggaatgac	480
aggtcagaaa	tggccacaaa	ctcagaccct	caatggacaa	aagaaaatga	aacaaaaatg	540
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<210> 66

<211> 599

<212> DNA

<213> Homo sapiens

<400> 66

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cttggccttc	caaagtgtct	gggttataga	atcacacttc	ttgaccattc	tcaaaaacca	180
ccgccaccct	caaagaagg	ggccaaatct	acacagatag	aactttacct	gtccctcgct	240
caggactctg	aaagagcatt	ctctgccccag	agccatgagc	aaactgaaag	cagaattgcr	300
ccccatttgt	ctaccocaag	tgatcatcac	agaaaocaac	acttagtagg	gactcaataa	360
atgctattga	atgaaagaaa	acataaatct	gaatgaaaag	ttagccacaa	gacatgtcac	420
atgctgtgac	gaaaagagtt	gggaatcaaa	agaactgggt	ctgggtctac	taataatgca	480
ttatgggcac	tcactggccc	tctctggatc	tcagggtatc	catttaattga	actgagagag	540

gtggagtagg tattcttttg cagtcattt cagctctgat tttgtgtgag gctgtaggg 599

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

<400> 67
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gctacttagg aggccaaagt ggaaggatcg cttgagccca ggccctcaag gctgcagtct 180
tctatgatcg tccattgca ctccagcctg ggcaacagag cgagactctc tctctcaaaa 240
aaaaaaaaaa aaaaagccca caaacagttg aaggatcagg aagaggggtat gctgaggcck 300
agatggagtc actggtgagt tccaccaaat gttaaatgaa taacaccgat acttcataaa 360
ttattccaat aagatagaag aggaaggat acttcacatc tcaatccgtg aagccaactat 420
taccctgatg ccaacaaga cgaagatata atgagaaaag catagaccaa tatattttat 480
gaatatagat gtaaaatctt caagaaaatg ctagcaaaact gaattcaaca acatatgaaa 540
aggattatac accatgcca agcgggtattt atctcagaat gtaaggttgg tgcagcata 599

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

<400> 68
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tggatttttt taaaagggtca ttatagcaaa ccaggcaaga gattgttgta gctaaacca 120
ggataatggc aatgaaaatg aacagaaata acaaaactga aagaattctg gggaagtagg 180
aaagatagaa cttcagaatt gattggctat ggagggagaa tgagagtgat atgttccaga 240
taaattaaga agctaaataa tttaaaatca tggaaacaaa acatttgtag gaaatatgcr 300
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tgcttttgtg tttaaaaata gtttttggcc aggcgcggtg gctcacgcct gtaatcccaa 480
cactttggga ggctgagatg ggtggatcac ctgaggtcag gtgttcaaga acagcctggc 540
caacacggtg aaactccgtc tctactaaaa atacaaaaat tagctcgggtg tgggtggcac 599

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

<400> 69
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tggtaagcag cttctaagat ggtccccagt gatttccaca ttotogtatt cacactctgt 120
gtgatccctt cctcttgagt ataggttgga catagtcaact ctttctaac aaatagaata 180
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gattttgcag tccagtcag ccttgagatg atttctactt gactgcaaac ttataagaga 420
ccctgaacta gctcaccoca gccacacotaa gccacacoca gattcctaac ccgcagaaac 480
tgtgagataa taaatgtttg ttgttttaag ccagtaattt gggggtaatt ggttgacag 540
cagtagataa caaatatatt attagtcagt aggtaaatac aaactaaagc taccaatga 599

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

<400> 70
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cttccagatg attcataaac gttaaggagc actgtggcag agaagagggg aggacttggc 120
catgaccatg ttcccttctca agaaactgag aaggaagcaa tgggaagaga taggaaatgc 180
cccgaggaga tttttgtgta tggttttgat ccaaacgggt aaacttgtga cctgtgtact 240

caccaaataca	tttaaatgtga	actcactgtg	gactcacaga	atcttcaaata	gcattattcr	300
aagagaacat	ttatgaaata	gaaatttagg	ggtccttggg	ttgcgaaaaat	cttagaatca	360
tgatcttgga	aattctaata	tcatgatgct	aggtatttgg	tctcgccac	aggagtagct	420
tgatattaac	aaagtgtgag	aaaaccatca	gaattctaga	agaatgaggt	cacagacaca	480
agacactgaa	gaacagaaaa	tctgagaca	agaaggcttt	tagccatagt	cgttgcagct	540
taaaagtaga	ggatcataaa	gtcatgggac	taatcattac	agcatataat	cacaaacat	599

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

<400> 71						
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gtgcttagga	gattgcctgc	tctgtccatc	cctgaaatg	aaagaatgat	ggagccggcc	120
catgggtctc	accactaga	tggcgctgtg	aggtgcagtg	ggaagagtag	ctggaggcaa	180
acctttgaga	ttcagatttt	ggacaaatat	tttaacttct	ggaggctcag	attcctcctt	240
gagatacaact	tggcctgtat	ccccacacac	acagggtatgt	agatcatacg	ggataacgtr	300
taagaaaagca	ctttcaagta	taaacacgtg	tgacataactt	gagcctgtgg	actgttgtca	360
ctgaccactc	caccctgtgt	accagaggct	ggggctgtca	gagtcctagt	tcccaggacc	420
ttccccaggc	ttctctatga	tcccttcaact	cctaccttca	ccacgtgtga	ccaagtcccc	480
tggtttccca	gctaggagag	attgccagaa	aggagctcat	gttgatactg	tacttgcttg	540
ctctttggaa	aagcacgtat	tgattaatct	cttcaccttt	gctgtacccc	ttttcctag	599

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

<400> 72						
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aattagctgg	gcatgggtgg	aaacagttac	tcaggaggct	gaggcaggag	gatcacttga	180
gcctgggagg	tcaaggetgc	agtgagooct	gattgcacca	ctaacctcca	gcctgggcaa	240
tagagcaaga	ctgcctcaaa	aaacaaaaca	aaacaaacaa	aacagaagcc	attcatacay	300
tgaatttttag	ggacccocta	gatccccctg	aagtctgctt	atctagccag	gtaagccaga	360
acagagtggg	agaaaaaggg	tatcaatgaa	gagaaacaca	ataaaaatat	tacctagggt	420
tataggtcat	tgaagagttc	agaagacact	ttcccaagca	ttatcctggc	aacaactctg	480
taaggtcaca	gagctagagg	caggggtgag	tgacttgctt	gaggtcacga	gctagcccat	540
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<210> 73
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 73						
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ggcaaacagt	tactcaggag	gctgaggcag	gaggatcact	tgagcctggg	aggtcaaggc	180
tgacagtgag	cgtgattgca	ccactacact	ccagcctggg	caatagagca	agactgcctc	240
aaaaaacaaa	acaaaacaa	aaaaacagaa	gccattcata	cattgaattt	tagggacccs	300
ctagatcccc	ctgaagtctg	cttatctagc	caggtaagcc	agaacagagt	ggtagaaaaa	360
ggctatcaat	gaagagaaac	acaataaaaa	tattacctag	gtttatagggt	cattgaagag	420
ttcagaagac	actttcccaa	gcattatcct	ggcaacaaat	ctgtaagggt	acagagctag	480
aggcagggtg	cagtgaactg	cctgagggtc	cgagctagcc	catggcaggg	cagaaagcgc	540
ttgaagtttc	tgaggccaag	cccagtgctc	ttcgtatttc	ccatcttgct	tcccaggag	599

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

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<400> 74
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aaccttctaa ccctaggaat ttgcaaacc cccaggtcc ccatctggg ggctcagaga 180
ctggaggtgc cttttttatt tttttcttct tcactttatg aacacagaaa aatcgtttgt 240
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gtattttctt tcaaattaac tttgcttgca attagctta gggaaaccagc aacaaaagca 420
aacttggccc gaggtcgttc accgcgaaaa tggattagag aaacttcttc cccgatttaa 480
ggggaaagat tcctgcggcc agcgcttttg ggaaagtgcc ccgaccgcag aggcgacgac 540
aggggagcag gaagctgctc acggtagtcg gcgttggcgg cagcgggtggc cttcctcat 599

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

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<400> 75
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actttgcttg caattaagct taggggaacca gcaacaaaag caaacttggc ccgaggtcgt 120
tcaccgcgaa aatggattag agaaacttct tccccgattt aaggggaag attcctgcgg 180
ccagcgcttt ggggaaagtg ccccgaccgc agagggcgac acaggggagc aggaagctgc 240
tcacggtagt cggcgttggc ggcagcggtg gccttcctca tctgggcgat gtgggctock 300
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tcatttacta aaaactttgt gagaattttc ttttactaaa atttttctt attacaaaat 480
cagtagtggt cattgtttta aaagaaataa caggtaaaga aaataaagag ggagggaaat 540
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<210> 76
<211> 599
<212> DNA
<213> Homo sapiens

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<400> 76
gggggtcccag gggaggccac gggccgcggg gcggggcggg ggcgccgcaa gggccccctg 60
cagcgcgggg agccgcctta cagctacatc gcgctcatcg ccattggccat cgggcacggg 120
cccgagcgcc gcctcacgct gggcggcac cacaagttca tcaccgagcg cttcccttc 180
tacgcgcgaa accccaaaaa gtggcagaac agcatccgcc acaacctcac actcaacgac 240
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gaccccaacg cggaggacat gttcgagagc ggcagcttcc tgcgcgcggc caagcgcttc 360
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gccgcgcggc ccgcgcgcgc gccgcgcgcc atcttcccag gcgcgggtgc cgcgcgcgc 480
ccccctacc cgggcgcgct ctatgcaggc tacgcgcgc cgtcgttggc cgcgcgcgc 540
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<210> 77
<211> 599
<212> DNA
<213> Homo sapiens

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<400> 77
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ttcattcagc tagacaagct ggctgtccca ggtgcagagg tcaggatgac ttgcctgggt 180
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cccaggcgtg ggactggggc tggagaaggc tggtttttgc ccttagtgcc agagttgags 300
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gagcatagca gggctgaaag gctttaataa agcgtgcct tgtaacaaag cctcctggag 540
tgtcatgata aagccccggg aaggagaaag acagggtggg aaagagcgga cattttcgt 599

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

<400> 78
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 ccagggtgga atgggcgcgc cgcaggggag cgagtaacct ggagacagtg cgcgcgcgcc 120
 ggggcctcat ccacagcggg gtcgcggggc gccccottag cccgcgtgac tgtgggatcc 180
 tgagaacatt ccgctgtatg tcttggaaac ttctaacctt aggaatttgc aaaccctcc 240
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 tagaattcgc cctagagctg tatcatgtat tttctttcaa attaactttg cttgcaatta 480
 agcttaggga accagcaaca aaagcaaac tggcccgagg tggttcaccc cgaatatgga 540
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<210> 79
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 79
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 atctcaataa cacatttttt caaagttctt tctctttgac cagggcatag gaatcaccta 240
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 tatttctagc aagctcccag ggaatgtcct tgcagccgac ctccatctct tgtgtaaacc 360
 aacagggagg gcttgcctcc ctttgcctcc aggccttgct cctggccctt gcagaagtgc 420
 atcttgcat caagtgacca aaagaagagg cattagaaaa tgtgaaaggg taaaagggga 480
 cctgcaccca gttttatagg tggggaaaca ggcacctcc atgccagaag gaatttgttc 540
 aagacctcac agcaatttag tgacaaagtc aagactcagg cctcctgtat aggggaaaa 599

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

<400> 80
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 gtatgtgttc aaggcagggg agggttcctt agggcactga ggaggacctt aggcctttac 180
 tagaggatcc tttggcccag actgacttgg agacagggac cccttccagt tggccattgt 240
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 agggatataga gcttgaaccc aaggtcccta cagtgcctca gcccgaaatc aggacgtggc 420
 ttcttgccct ggctctgtca cccagcttt caagatgttt tcagatatac tcttgttgaa 480
 tgtcattgtc acagtcaacc atacagctgg aaacaggaga tgaggtagag tctaagggct 540
 aggattccaa gactcagaaa gtactcaaag gaggagatga agcactccac cccatctct 599

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

<400> 81
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 tgcaaaggct ggctttggcc tcagccaggg agaggagatg ctggagagag ggccggggga 180
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 aggtagtctt aagctattta tttaacaggt aagtcattc ctcaagctgc agtccatccc 360

cactccttag	cccctacctt	cacatcctca	ccagattact	tttacttcca	tattaccttc	420
attaagatga	taatcaaagt	cagtctccat	tgggggaggg	agagggttcta	gtccagcttg	480
gacacttgta	actgtcatat	cttgggcaag	tcacacaccc	cttctatggc	totatggagg	540
ctccacacac	actcacaata	ttcctattta	tttctattgg	gaacttatac	aagcaatga	599

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

<400> 82						
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gctccagggt	ctcagatagc	gagataaaact	ggtgctctgc	cccatggctg	agatccaccc	180
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tctcagaaga	gggagtgtgg	ggctggcaga	ggggttcagg	aactccacag	ggagcagaca	360
gcattcctct	tttgaggcca	agcattgagg	accatgccag	gggctctgca	aaggctggct	420
ttggcctcag	ccaggggagag	gagatgctgg	agagagggcc	ggggcaggag	agcagaactc	480
actaaggcca	ttccatctcg	cccctactct	gcctgtccat	cccattttaa	attttgttca	540
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<210> 83
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 83						
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tgcatatcca	taatgaccaa	taagggtgag	cttcttttca	catgctgatt	ggccacctat	120
ataacttctt	tgagagtaatg	tctgttgtag	tcttttgtcc	atttttaact	gggtagtttg	180
ggtgtttctt	tgttcttcag	ttgtaagaat	tctttgtata	ttctggatat	taaactttat	240
caaagtgtgt	atatgaaaat	attttctccc	tttccatgga	ttgtcttttt	actcaottgr	300
tagtttcatt	tgattcaaga	aagtttttgg	ttttgagaag	gtacaatgta	tctatttttg	360
ctgttggtgc	ctatgotttt	aatgtcaaaa	aatgatgtta	agaaaccatt	gccaggccgg	420
gtgcagtggg	ttcacacctg	taatccacag	actttgggag	gccgagtggg	gtggatcgct	480
tgaacccagg	aattcaagac	cagcctgggc	aacatggcaa	aacctgttg	ctacaaaaaa	540
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<210> 84
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 84						
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<210> 85
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 85						
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<210> 86
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 86						
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<210> 87
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 87						
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<210> 88
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 88						
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<210> 89
 <211> 599

<212> DNA
<213> Homo sapiens

<400> 89
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<210> 90
<211> 599
<212> DNA
<213> Homo sapiens

<400> 90
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<210> 91
<211> 599
<212> DNA
<213> Homo sapiens

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

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

<400> 93						
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<210> 94
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 94						
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<210> 95
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 <213> Homo sapiens

<400> 95						
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<210> 96
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 <213> Homo sapiens

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<210> 97
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 <213> Homo sapiens

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 <213> Homo sapiens

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<210> 100
 <211> 599
 <212> DNA
 <213> Homo sapiens

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<210> 101
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<213> Homo sapiens

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

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

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<210> 104
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 <212> DNA
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 <212> DNA
 <213> Homo sapiens

<400> 105
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<210> 106
 <211> 599
 <212> DNA
 <213> Homo sapiens

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<210> 107
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 <212> DNA
 <213> Homo sapiens

<400> 107
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 <212> DNA
 <213> Homo sapiens

<400> 108						
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<210> 109
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 <212> DNA
 <213> Homo sapiens

<400> 109						
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<210> 110
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 <212> DNA
 <213> Homo sapiens

<400> 110						
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<210> 111
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 111

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<210> 112
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 112						
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<210> 113
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 <212> DNA
 <213> Homo sapiens

<400> 113						
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<210> 114
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 114						
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<210> 115

<211> 599
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<210> 116
 <211> 599
 <212> DNA
 <213> Homo sapiens

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<210> 117
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 <212> DNA
 <213> Homo sapiens

<400> 117
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 <211> 599
 <212> DNA
 <213> Homo sapiens

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ggctagctca	ggtctagcct	tggcactggc	aatcactgat	tcacattgaa	tatgtacat	599

<210> 124
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 124						
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aaggaagctg	agacacagag	ggctgagggg	tgtacctagg	gccaccacag	tgttagtaag	120
tggccaaaaga	gggattcaaa	cccagggtctg	cctaacacca	aaacctgtgc	cctaactctt	180
gccacagtgc	tattcacact	atgccctgaa	gottctccag	ttctcactct	ctgggatggg	240
cagcttcaga	acagactcag	ottcoatgac	ttgacctttt	gtgtactggc	ttcttgtacy	300
gcgtatgaac	tgcacataaa	attactccca	taaataattt	ttcaatacaa	gatcttatga	360
tggttcttag	cagcttagcg	ggttagagtc	aaagtctcca	tgttggatct	gtcctcacac	420
cttcacccaa	ctaagttaa	actttttatt	gacatccctt	ttggaaagtg	agacttttct	480
gatctgatca	aatcctggcc	ttaagaacga	caaccaatat	tgtaatcttc	aaaggctcag	540
acaggtgaaa	tgacttgcct	agggtcactc	agcttgccag	ggtcagaaca	gaaattgga	599

<210> 125
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 125						
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aggaagccaa	cagtttagaga	tgagaagctg	agaagagaga	gtcttgcctga	tgtctaagtc	180
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caaaatgact	actttactta	agctagtgtg	agtttgattt	ccgtcactca	aaccaagagr	300
gtcctaatag	agaccagcat	cttccattta	ttaagctcac	ttatgtgctg	ggagcttttc	360
actgtatcac	tttatgtaat	cttgcacaca	gtcacatgaa	ccatattggcc	attttataga	420
caaggaagct	gagacacaga	gggtgagggg	atgtacctag	ggccaccacg	ctgttagtaa	480
gtggccaaaag	agggattcaa	acctaggctc	gcctaacacc	aaacctatgt	ccctaactct	540
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<210> 126
 <211> 599
 <212> DNA

<213> Homo sapiens

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<400> 126
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ccttctaaca ctatgactgt ttgttgttgt tttttttttt tctaattacc gtgctcccag 180
gctcattgag atctgcaggg ggtcgacaga ggaaatgagg ccagggtctt actgaggcgg 240
gggctatggg ttgggtgaagg gaaagctcca cgcggagccc tccagtgaga ctgccacagy 300
tccttgggctt cctctgctgg gaacgctgcc taagctctgc aaacagcago tgaggatggg 360
ggatttggtc agcattaagc tgtattaagt cgagctgttt ctacaaagac tacatttttg 420
gataaacatg gtaccaaagc cactactaaga caatatagct cttggaagaa ggggcttcac 480
gccacctca gcacctagt cagagaactg ttctcctaac gcaccacac acagacttcc 540
tgaggagaaa ttctgacagc atccccacc tctgttcctg ccgggaacaa gtcccttag 599
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<210> 127

<211> 599

<212> DNA

<213> Homo sapiens

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<400> 127
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tgagtatgtg cttacctctc tcaaattccat tcctcccatc tgctgcccc gataccacat 180
accagttctc attcacttca gctaggactg tgctcactga ggtcatctac ataacctcct 240
gcccatcctg gtcaaggagc catctccctt agagcaggaa aggactttag tctagaaatk 300
atattttagg tcaaggggaa gtagaatgat atatcagaaa taatatgaac ctggatttaa 360
atctcagttt attcattcat tcaccaaca ttottattta gttatttatt tatttaagac 420
aggatcttgc tctgttgtcc aggctggaat gcagtgggtg gatcatggct cattgcagcc 480
tcaaactctt gggtcgaagc catcctotca cctcagcctc ctgagtagct agaactacag 540
tcattgtgcca ccacacatag ttaatttttt ttttcttttg tagagaaaga gtttacta 599
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<210> 128

<211> 599

<212> DNA

<213> Homo sapiens

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<400> 128
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gagagcctcc ccgcaccggc ctttgggagc cgacaaggaa tcctgtctt ctagtagtct 120
tcaaagccag atccagcttg tctaggttaa ggattcgatg cctccaatga ggcagagaaa 180
atgaacatgc ccgttcoccc aaggccttca agagcctcca ggctcacaga gattaacttg 240
tcctcacccg cctgcctgcc ttttgtgcag atctctgcat tgtcctgaag aaagactccr 300
gcactcgggc tgaactccg tgtgccgatg accctggcct tgtcccgga ggcaactggaa 360
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cagcactggg cagcgcggag gcggccccc gaggactcag ccccgggctg ggagtcaggg 480
attcgccctg aagccttgca ggtgccccg tcaccgggag tcggattccc gcgggacgag 540
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<210> 129

<211> 599

<212> DNA

<213> Homo sapiens

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<400> 129
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aagttgatat aagaaaaacg ttgaatcagt aatactacaa gttgtgaatc aggttcaactg 180
tgtactgggt accaacttgt ctgagtggga tgagatagaa cgcacacaca caacaagtta 240
catgaagtgg gttcactgot tacagagatg cagcaaggga ctgtagaagc gtaggacgcm 300
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tgtctccac ttgtacggca gcggaggacc ctggaaagca gcctgtcctg ggttttatac 420
cccgaaaaac aagactcgct ggactaaagc gttgaaagac attctgttct ggggaggact 480
ggcacagagc caggctgttc cagccagcca ctccctatct caggatgttg cccttccagc 540
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atattctaca gttattcttg agaactacaa ggcagaaagg gggtagaact ggatgagtc 599

<210> 130
<211> 599
<212> DNA
<213> Homo sapiens

<400> 130
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tgaaggaatg aaatgtcttc acatagacaa gaaatgtcta tgtcctaatt cccagatcct 180
gtgaacatta ctttatatgg tgaacaacgt gattcagtta aagatottga gataaggaac 240
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gtttgacaca gacagaagac acatagaaga gaaggtgata tgaagacaga ggcagagatt 360
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gaatggattc tctgtctgga gcctccggag gaagtacagc cctgctggca ccttgatttg 480
ggacttccgt cctccagaaa agagagaata catttctgta gtttcaagcc accaagtttg 540
tggtaaagtt ttttacagca tccacaggaa actaatacca gtggtaaagt gtactttac 599

<210> 131
<211> 599
<212> DNA
<213> Homo sapiens

<400> 131
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cttttaatag tgaggacaac taaagctatg aatttccctc tgagtattgc tttggcaata 180
tcccatagat cggatatcca ttcatccaac aaatTTTTTT ctagctttat tgaagtatga 240
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cattggcaaa tgattactac agtaatgcta atagcatatt cattacctta catagttact 360
gtgtgtgtgt gtgtgtatgt tgtgtgcatg tgagataagg cacatgaggc ctactcaaca 420
aatttcaagt atatcataca ttaattattaa ctatagtcac gatgcttaca ttaggtctcc 480
cgtacttatt cttcttataa cagattttgta aacttccgac aatatctccc ctactcccc 540
aggccctggt aaccactggt ctacctctt gtactataag ttcacctttt ttttttttt 599

<210> 132
<211> 599
<212> DNA
<213> Homo sapiens

<400> 132
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tcagcattaa gctgtattaa gtcgagctgt ttctacaag actacatttt gggataaaca 120
tggtagcaaa gccacactaa gacaatatag ctcttggaag aaggggttc atgccacct 180
cagcacctag tgcagagaac tgttctccta acgcaccac atacagactt cctgaggaga 240
aattcctgca gcatccccac cctctgttcc tgcgggaac aagtccttca gccagggar 300
aggcatatga cccaagctga gccaatcaga ggagccatcc tctgggtac tgtgattgg 360
ccagtgtggt catgtgacat agcctggcaa attagagtcc ttttccggg atgtttttta 420
gctggtggga aagaatcctc tctgatagg tcatggaatg gtgaactgag aggttttgg 480
agtcatgtcc tcaccccata ggaaacctct gtggcagggc agaaggaagc caacagttag 540
agatgagaag ctgagaagag agagtcttgc tgatgtctaa gtccctgtcc ccgactgcc 599

<210> 133
<211> 599
<212> DNA
<213> Homo sapiens

<400> 133
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atgacatata atgaagacat ataatggaac ttactcatt tatcagtga acagatatta 120
ctttcattga atcagaattc aatcagatat tagtttttaa tagaatatt cctcatttgt 180
gggtgctatt cacaatatat aaaagctata gacatgacag actttgaaat ttaatctgca 240

ttattaatat	tttottoacc	cctttctttaa	gttcagagtc	taaactttgc	acaatcaacr	300
aaacattaac	tggagtcctg	atgtgtagca	tttgccatt	tccatagtgt	aaatactccc	360
accgtggcca	gtttcagcta	ccaacatcat	gtccctggat	acagagttrg	gaagagatgt	420
atagtagoac	agagctttgt	agtattttca	ccatacaaat	gcaatagttr	caaacaatct	480
caagagcata	gataatagta	aaacatagt	aaatagttca	gatgtgacaa	gtgttgggta	540
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<210> 134
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 134						
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tttgtcctct	gtggccccc	cagaccacat	ctgttctctc	tgcgccaggg	tagcccccca	540
gagacaacga	ccatgcccc	aagttttatt	ttcttctctg	ctgcagcctt	aacagggtca	599

<210> 135
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 135						
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gaggtagttg	agggtttagg	agaaaaatta	agctttctgt	tcaggacaca	atggccaact	180
ggaagggggtc	cctgtctcca	agtcagctct	ggccaaaggga	tcctctagta	aaagcctcag	240
gtcctctcca	gtgccctaag	gaacctccc	ctgcttgaa	cacatacgag	cttgacttts	300
tgtgtgtgtct	cagcctgttc	ctgagggtag	acatgacaag	atagctgggg	gaatatgtcc	360
ctgatgaaaa	acagttcaga	caggggcatg	taccatgaag	gatggggaag	gggcccagat	420
tgggaaagca	tgttcccagg	atcacattgc	accacatggg	gagaaccagg	cttttcatct	480
cattgcttgt	ataagttccc	aatagaaata	aataggaata	ttgtgagtgt	gtgtggagcc	540
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<210> 136
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 136						
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acccttgtca	aaaatttaatt	agtcataggt	gtatgggttt	atctctggac	tctctattct	180
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ttcttaaaaa	aaaaaaaaca	aaaaacagca	gattcaaac	actttcttct	ggcctttaak	300
tccaatatta	taattagaat	aaactgtctc	caaaaggatg	tgaataacac	accctacaac	360
ctggactgag	gttttttcat	tattacactc	atgacttctg	ctccaatatg	tgtttgaaca	420
ctgtttgagt	gagaggcggt	gtttcttaac	attctcttct	tctgcataat	cagaacaaat	480
aatacaaaag	gaatctagaa	actacctaac	cccatagcca	gatcattctg	acaatgctat	540
agaaaaatta	ggtaggatat	gccatattat	aaagttaggg	catgagttca	aaaaacaaa	599

<210> 137
 <211> 599
 <212> DNA
 <213> Homo sapiens

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<400> 137
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gcaccaacca gtccgagtggt acaccagacc aatcggaaca aatgccagct gtcaacaaca 360
ggaaacactg tactgtacct gacttagtgc aaaggggcct gggaaatgga gttgctggct 420
gagcaattgt tgtgcagtga tgactcaccg tgtggcacca gatgcacca tctgggtgga 480
cggctagctg gcctgcctc aaatcacata aggtaccaca agcttccatc tcagggtgtc 540
gctttcaacc cctgcctgtc cctccaccg caccctatca tcaaggccag ctagtccac 599

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<210> 138
<211> 599
<212> DNA
<213> Homo sapiens

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<400> 138
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ggctgtcagc agccaataaa ggactacagg atgtgtttgg ttccaaaggg acttggctct 180
cggcagaagc ttgtttgtag gcacactggg tgtcttggct ttctggcact gtggactaca 240
gcttaactca gagcatatat tcaatcattt ctcaaacatt tgtagctca agcactgtay 300
caggcacagc actggcccta gcagggtcta caaagatgaa ccaggcacca tttctgccac 360
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cccacctggg gcatgtgtgc catctaccag cccactccac attctctgag caggctctctg 480
tgctcttctc tcagcctgga attctctctg ccacctggct ctgtctgaag acgccacctc 540
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<210> 139
<211> 599
<212> DNA
<213> Homo sapiens

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<400> 139
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ccgtgtgccg atgaccttg ccttgtcccg ggaggcactg gaagggatgg cggccgtcgc 180
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gcctcccttt gggcgagtc ccagcacaat gcgcgtcatc ccgcagacct gcccggcaga 420
ggcggcgggg caggagcgcg cttggcttcc tgtctcgctg aatggcttga atgggcgctg 480
ggcccgttcc taatccccta gcggctgact gtcccggcag gggcgaggga gggcgggggg 540
gcttgacagc ctggcggtct ctcgcaggct gcaggcagtg gggcccgcct gttctagtt 599

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<210> 140
<211> 599
<212> DNA
<213> Homo sapiens

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<400> 140
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aagggaagcct ggagacctct gtgcagagcc tctttgttgt acatgtgagg ttctgagacc 180
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catcagctca attcccccaa cacacaggcc tagagaggag aaggacttat tcaaggccac 480
aaagcaagtt oaaagcacag ctggaactag aatccaagtg tctgcccc tgcctccagc 540
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<210> 141
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 141
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 ctaagaagaa aataagacaa ttggcctgga catactttgg agtcaaagct gaatagggag 540
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<210> 142
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 142
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 atgctgcat gcacatgtgc ctgtgtatgt gtgtttctgt gtgcaagaaa ggcccttgaat 240
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<210> 143
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 143
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 aatgggctgt tctgtctgtt gagaacctgt cctacagtt tccgtgtggc ccacaggggc 240
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 ggcacatggg aggaagagac gatctctgcc tgaggtgatc agagagggca ttaagcagga 480
 gtggcatttg gatctcaaag cagggtgagg acatgtggca cactggagcc agtttgtacc 540
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<210> 144
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 144
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<210> 145
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 <212> DNA
 <213> Homo sapiens

<400> 145						
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<210> 146
 <211> 599
 <212> DNA
 <213> Homo sapiens

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<210> 147
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 147						
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<210> 148
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 148						
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<210> 149
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 149						
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<210> 150
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 <212> DNA
 <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
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<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
<211> 599
<212> DNA
<213> Homo sapiens

<400> 154
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<210> 155
<211> 599
<212> DNA
<213> Homo sapiens

<400> 155
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 <213> Homo sapiens

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<210> 157
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 157						
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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> 163
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 <212> DNA
 <213> Homo sapiens

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ctgaagtctg ttgttttgaa aggacagtat gtgtgagttg tacaacagcc ctccagtctg 420
tcagtgttca ttgatgaggg tctgtggtag tggagattca ttcataagata tctgctaagt 480
ggctgaccac acagtccac gttataagtc ggctattttc tttgcttaca gaagctccag 540
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<210> 164
<211> 599
<212> DNA
<213> Homo sapiens

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<400> 164
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tcctottaga aagtcagagc tgaaagagtt gcccgcgaga taaaatgatt gaaccacaga 180
agttacagag aaacagtaac tccataagaa taaagacaaa ctagaattgc ctagagagta 240
atgtgaatgg tgaggaaatt caaaagccgc attgaatggg ggtgaatgaa gaaaactggr 300
aattttaacc tggagaagga gagcttagtg gtccatgaga tctgtgcaac agatgtcctg 360
agtgaagcag agaacagagc taagcccaac aaacaggact tacggggagc tgaattctac 420
cggatataag gaagaatgtt ctcatgtcct aagaatggaa gtgatgatgt tggtaaggag 480
tgtgtccccc atcatgagag ggactcaatc agaactggaa gagcacgtag tgggaagcgt 540
gaagaaggaa ggtgagcgtg gtagaggggtg tgaactttag ggaccttgga ggtccctca 599

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<210> 165
<211> 599
<212> DNA
<213> Homo sapiens

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<400> 165
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gcatcctgta ttttatcagg catctctggg agottgttgg agatgcagat tccctggccc 180
cacttcagac ccactacatc agaactctgt ttgtaacact aaagtatgag aagctctgat 240
tagtggctcc tgggtgtgtt agtccatttt gcattgctat ataggaatat gtgaggctgr 300
gtatttacaa agaaaagacg tttgtttggc tcacagttct gcaggaggca aaagaagcct 360
ggcaccagca tctgcttctg gtaaggactg caggggagct tccaatcatg cagacagtga 420
aggggggac aggtgtgccg caggccacgg ggaggtgtcc cagactgttt tcaacaatca 480
gatctcaggt gaactcatta tcacaggagg ggcatcaagc cattcatgag ctgcccccat 540
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<210> 166
<211> 599
<212> DNA
<213> Homo sapiens

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<400> 166
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agagggcagg gacagctagt agaaaaatgt ccaatagcac tagtagttaa acaaaaaagc 180
acataaaaca acaataaagt ctatgatttg catatatatt ctgaaatgaa aaatctctat 240
gctggtggtg atgacataaa actgaaaaact acacaattgt ttcaaaggaa aggtaaagcr 300
aattttgatt acataaaata tgacgtcttc tgcattccat agtggaatgt gtggaaacta 360
tacaggaaca tggaaacttg cttatgatgt gttctgctag aagctgcaag acactaaatt 420
gcatgtacag gccaaataca actgcccaca gccatattgc tatgaaaaag ataactagaaa 480
ggatatcagg gtgttttccct tctttcatcc cctccatcct ttgcatttac agatgaggaa 540
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<210> 167
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 167
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 agaagagtag cagttagaaaa gtgcggagaa ggtccagggc ttgggagcgg caggaggagc 180
 gggtccgggc tggggagggc agggccctct gaacggagtg gcctggcagg cttgctatct 240
 gctgatggga ggagcctgga gggcaagctc aggtgtgccc tctaactca ggtgtgacay 300
 ggggtgagatg catcactcat gtattcacct aactgtctac taagccagtg cacattattg 360
 aactcctact gtatactagg atgaacagga gccagtccct gcctttggga ggcccaggag 420
 gtgatgagga ggacagacga gaaacatgta tttttttttt aaccttaaaa tcttttatca 480
 cttcaacatg tagatttcaa cattaaaaagc gtccctgctg ggcaacaago agagtgcaca 540
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<210> 168
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 168
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 ggaggcggcg gcttttagagc aaccgcggga gctgcctgcc tcggtgcggg cgagtatcga 120
 gcggaagcgg cagcgggcac tgatgctgcg ccaggcccggt ctggctgccg ggccctactc 180
 ggogacggcg gctgcggcta ctggaggttt gggccgcgtc cgcgctttcc ccttcctct 240
 cccgcctcc ccggtcccca gactggctcg tgcaagccga gtcccggggc ccgggggtcs 300
 cgtcaactcc gctggcgtat gtgtgcagat tctcccagag tcggagaggg aatccgcccc 360
 gccagccgccc ttgtcaaagc gtccctgtcca cgaccacaga gcgttcctct gtgcgacgcy 420
 ggocctcctga ccccgagccc cgggccttct tcgctgcacc tcggctgctg gcagcttcga 480
 tttttcgttt agggatgcag ccgccccggc cgggaggtgt cagccactgc caggtgtcag 540
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<210> 169
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 169
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 cattttaatg ggtgaattgt agtatctcat tgtggttgga aaaatacttt aaatcaaacc 120
 aaaatacaga atgaaaatct taccttatca gctcatcagg gttaaagcag cttatatcag 180
 ggagccaagc agacacgtca tggctatgtg gaaggcactc ttttaaagggt ttcttttcat 240
 ctgcagacga aagactcttt gaggtgctca atgtcacagc cagttgcttt aaaatagaak 300
 ctgtctggtg ataaatttca tcagcatgtt gtgttgccac atgtctatgg atgctggttt 360
 ggtctgtgaa tagctgocga cagcatttcc acaatttttc tttacattca aaactccttt 420
 ttgttggaac ttcttttggt ttgacaaaaa gggcaaggc ctgcaattag atttcaaagt 480
 ctaacactgt taaataacct taggtttatg gctaatagaa gtctcactaa gattcttttag 540
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<210> 170
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 170
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 tgtgtttttt aggacgattt ctgtctccac gatggtggaa acagtgggga actactgctg 120
 gaaaaagccc taatagcaga aataaacatt gagttgtacg agtctgatca tgttttctgt 180
 actcttgggg cctctattgt gggacttaac attagtctag atagcttttt aaatgctgga 240
 ttaaaatgga aaagagctgt tttcatggtt gactatctga ttgttgatca aagaaggcay 300

tgatgtttat	tttaagtagt	gctaacattt	actgagcatt	taccaaccag	gtgccaggca	360
tgcacctaa	tgcccttagga	gtatgttcat	ttagtcccag	gcttgcttcc	atgctgcttt	420
cagactttcta	aggaaaggaa	ggtgaagtct	cacatcaccg	caggcatctg	catcaacttt	480
agtgaatttt	tcctgtagct	tgtcaaaaaga	attattgggt	ctatgcatta	ttttttgaca	540
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<210> 171
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 171						
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tccccagaac	tgaccccaat	tgggattatg	aagcagtttc	ctcagacaga	cagaaacgaa	180
gctatatgat	atcatgcctc	ctagctggca	tggataaage	tgcccttaag	gctgtaaaact	240
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gcatttcaga	ggocataaot	aattatacca	cottaagccc	tgataccaat	gggggcagaa	360
tctacctacc	cattttacact	tcattttccca	gtcagccccc	aacgtctgaa	agaaacttaa	420
aaaactagaa	gatggccctc	aaacctccca	aagagactta	atcaaagtgg	cctttatggt	480
ctttaatgat	gatggctaga	atttaaaaaa	agaacaaaag	aaagaaaaga	aaagaagtat	540
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<210> 172
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 172						
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aagaagttrt	ctcatggatc	aaaagtctta	gctgaagact	tcatgttttc	cattaactgc	120
agtcaactcac	atctatttta	gcttctgcta	tcaaaaatgg	aaaagcagcc	agtgaacttct	180
gctttaaccg	aggtgtctct	gtattttttg	taaacttttt	tctattttta	aatttttato	240
tagagaaagg	gtcttgctct	gtcatccagg	ctggagtgcg	gtggcacgat	tgtagctcay	300
taactttcaaa	ctcatgggct	ctaacaatcc	tcctgcccct	gcctctcaag	tagctcagac	360
tacaagtgcg	agcccagcta	atttttaaga	ttttttgtag	agatgggggtc	tcgttatggt	420
gctatgtagc	tggtctcaaa	ctcctggcct	caagcagtcc	tcctgctgcc	acctctcaaa	480
atgtttgggt	tacaggcagg	gcgcagtggo	tcatgcctgt	aatcccagca	ctttgggagg	540
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<210> 173
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 173						
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ctcatagatt	cctattttttc	aattggtttat	ttcttttatt	ttcttaatta	tgttgatgct	180
caaattgtcc	tagatttggc	cagtgggaagc	ctcttcaagt	tgatttccct	gtccttttga	240
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acagaaaagaa	ataactgcac	agaaaaaaga	aaggaccata	ataaaagact	aaaagaaact	480
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tgtaatgaga	atgratttagt	tttataatga	gaaaaattac	ataaaagggt	tttccctttt	599

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

<400> 174

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gttgtaatgt	ctcagagctc	gtccactcoa	ttattcttaa	aaaggaaaaa	ccttttatgt	120
aatttttctc	attataaaac	taatacattc	tcattacata	aaatttttgaa	tatacagaaa	180
aaaagaacaa	tatgaaaaaa	acttttcata	attccaagag	tttcttttag	tcttttatta	240
tggtcctttc	ttttttctgt	gcagttattt	ctttctgtgt	tatatgctca	aaataatttr	300
cacttaatta	tacctataat	tgccaatgca	caaccatctt	tgttgatctg	tgagggcccc	360
tttttttgtt	ctaatacacac	acttttcctt	tacaaaataa	gcattaaata	ccttgtgctg	420
gaaaagtaagg	cagtgcctcaa	aaaagtgatg	gggacctgtc	aaaaggacaa	ggaaatcaac	480
ttgaagaggc	ttccactggc	caaatctagg	acaatttgag	catcaacata	attaagaaaa	540
taaagaaaat	aaaccattga	aaaataggaa	tctatgagtc	tgtgcaagaa	taaatagat	599

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

<400> 175						
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tatcagtcct	atggctgaac	caggggttga	aaatgtgggt	ttctatatct	tattctatgg	120
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tgaaaaagag	gataataact	tcttgctata	ttagcaatgt	aatgagactc	aaatgaaacc	240
atgtatatga	aaaactcctt	aaaatgctac	aaaagttaat	ggttttataa	aagagcttty	300
ttaaaaatgg	ctgctttatt	gaaacgtttt	aacagtttct	tttttaaaaa	agcagccaat	360
ttggaggacc	tacgcatttg	gatgggtgaag	ccctttggca	gtctgagtaa	gcccatattg	420
gttctgtgtt	gcagcctggg	caactacctc	tccatggctg	catcttaatt	ggggtcccca	480
gaagaaaacc	tggagggaaga	ttcatgtgaa	agtgatgtat	taggaagtgc	tcccagaaaa	540
aatggtaagg	cagtggggca	ccgtatcaca	caaggcactc	ggaggagaac	tttggctta	599

<210> 176
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 176						
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aatggcagct	gtattcatto	aaaagcatag	tctggggcca	aaatcctaca	cattccagga	120
gctcctgtta	ttggtaatga	ctgcagatgc	tgagaatcag	gcttttgtat	ctgtgctgtc	180
gatctaagag	ggcagggaca	gctagtagaa	aaatgtccaa	tagcactagt	agttaaaaca	240
aaaagcacat	aaaacaacaa	taaagtctat	gattggcata	tattttctga	aatgaaaaaw	300
ctctatgctg	gtgggtgatga	cataaaactg	aaaactacac	aattgtttca	aaggaaaggt	360
aaagcaaat	ttgattacat	aaaatatgac	gtcttctgca	tccaatagt	gaaaatgtgg	420
aaactataca	ggaacatgga	aacttgctta	tgatgtgttc	tgctagaagc	tgcaagacac	480
taaattgcat	gtacaggcca	aatacaactg	cccacagcca	tatgcotatg	aaaaagatac	540
tagaaaggat	atcagggtgt	tttccttctt	tcattccctc	catcctttgc	atttacaga	599

<210> 177
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 177						
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agcttaagtg	attaggaaca	caagttccga	tttctgactc	ctgggttccc	atcctagctc	120
tgtcattttg	tgtgggattt	tggggaaatt	actgaatato	gtagaatctc	agtttttgtt	180
ttttttttca	tttgaaaact	caaggatagt	atctacctta	taggggttgaa	atagggatta	240
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agactatata	atcccattct	tctaaottag	cactgatgag	tctcaatctg	atttttaggtc	360
atcagggaca	aatcattttt	aatgggttga	aaattatttt	tattgtagta	ggaactacta	420
gcacataaat	ctcattttat	ttcacagata	cagcttagca	aaaatttaac	aagcaagttg	480
atataagaaa	aacgttgaat	cagtaatact	acaagttgtg	aatcaggttc	actgtgtaot	540
ggttaccaac	ttgtctgagt	gggatgagat	agaacgcccc	cacacaacaa	gttacatga	599

<210> 178

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

<400> 178
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 cagacagaag acacatagaa gagaagggtga tatgaagaca gaggcagaga ttggagtgat 180
 gcagccgcaa gcaacggaat actggcagca aocagaatct ggaagaggca aggaatggat 240
 tctcctgctg gagcctccgg aggaagtaca gccctgctgg caccttgatt tgggacttcy 300
 gtcctccaga aaagagagaa tacattttctg tagtttcaag ccaccaagtt tgtggtaaag 360
 ttttttacag catccacagg aaactaatac cagtggtaaa gtgtacttta cctccccgtt 420
 tgcctagatt gctcttgatg gctggaatgg tctgtttggg gctttgatat ggtttggctc 480
 tgtgtcctca cccaaatctc atctccaatt gtaatcccca catgtcaaag gcgggatctg 540
 atggggagacg actggattgt ggcggcggat ttccccctta ctattctcgt gacagttag 599

<210> 179
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 179
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 ctgtgagggg gtcacaagtc atgctaccaa gaaccagaac catacagggc ttgactccat 180
 ccttgagccc ctgggtgaca gtttcccatg gctotgacaa ggtgctagaa gtgagctggc 240
 atatgctctg ccttctcaga caggctactg gtctggctctg tcctgggtgtc tgtcagacak 300
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 ctgatagcac aacctctaga ccactgggtc tgaggaccag agtgggtggag ccatgggatg 420
 ctggagcagg aaagtcattgt agggactggg aacttgttct aacctcccca ttgttggggg 480
 gatgccttag acctgggagg acagggtctt gtccaaggct acacagtgca acaggagtgg 540
 aatggggcat gaactcaggg tttttttctt tatttccagt tcagcatttt tgocctcatt 599

<210> 180
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 180
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 ccaaagtgtt gggattacag gcatgaacca togcacccag cctacactga tcaactcttt 180
 agggatattg taaaaacaa gattcatggc acaagccaat gccaaactcat tggagtggt 240
 atataatttt aaactttgaa agaacataaa agacacaaac atatgcatgt gtgtaatatr 300
 atcagagaat attttaggaa aataaaaaacc atcgataacc ctacatgcct agataatcct 360
 tactaacatt ttggtatata caaccttcca tgtttatata tgcacttctg gttttgtcat 420
 gaacatgcat tctatatctt ccaaatactt actgagggtc tactacatgc taagctctgt 480
 tccagcactg agaatacatc aattaagacc aaaattcctg tcctcatgaa gottataaat 540
 gaagattata ctttcagata gtaataaatt ctttgaaaag cagaaaggga tagaacgtg 599

<210> 181
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 181
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 catggctatg tggagggcac tcttttaaag ggttcttttc atctgcagac gaaagactct 180
 ttgaggtgct caatgtcaca gccagttgct ttaaaataga agctgtctgg tgataaattt 240
 catoagcatg ttgtgttgcc acatgtctat ggatgctggt ttggtctgtg aatagctgcy 300
 gacagcattt ccacaatttt tctttacatt caaaactcct ttttgttggg acttcttttg 360
 ttttgacaaa aagggcgaag gcctgcaatt agatttcaaa tgctaacact gttaataaac 420

cttaggttta	tggtctaata	gaagtcact	aagattcttt	agattatctt	tccacagggg	480
cttctagttt	tatgttccat	tatgtttata	aattctctga	gaagtaacac	ttctcttatt	540
agtaagcttt	agaagagact	attagagaaa	ttaaaactag	gctttatatt	gaggaggtt	599

<210> 182
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 182						
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tggtcaatat	caaaatagat	gagccaaaaa	gaagggaaca	gtgtgcttaa	ggtttaaaaa	180
cgtaatgttg	aagttgttgg	ttttagttac	tttacttttc	tattttacag	ggttggtttt	240
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tataaaatta	ggattgactt	atagagggga	aatttatttg	gtttattaag	atcctttcag	360
atggatttta	tacctgcttc	tctatactag	ccaagtctgt	ctgagtgaag	tggtaatgtt	420
atctttaatt	tacattttta	aacttttaca	tagttaaatt	ttaataaaaa	atctgttctt	480
gcottgggaa	ctaccataga	tacgttttct	tcaggggtaca	ttgagcgaat	tcccccattt	540
gtattcgtat	tgttttattt	catttcctct	ttccttacc	caggttgtct	tatgagttc	599

<210> 183
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 183						
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agaccttaac	attctaaatc	tgagctctaa	ctocatggca	ttcatatgaa	aatggaatta	180
ctttttaata	tttaaaatta	tgctctttca	aacacaaaaa	tctaaaactg	aaaactgtaa	240
tgaaaatttc	ttctctctat	aattcgatca	aataaaaaaca	cacgacacta	atgcttatty	300
gatctacact	cctcccagag	aactatgcaa	ttaaattcca	actttgaaag	caccacagct	360
gagccaggat	gtacagcttc	ttgaggggct	caaaagatcc	atgacagttt	cattcctata	420
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 <212> DNA
 <213> Homo sapiens

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acotttatcat	tctcggaacc	agtaoaggac	aaaactcaaa	accagoact	totaagtact	360
gcataaaact	ttgatctgcc	aaaaagcaca	gtggctaaca	gcattggccac	tcagttagtg	420
caoctacgcc	tgaatttggg	ctccaccact	caaaagcaat	ctcattctag	cttgacctct	480
tggaagtcat	ttctctattg	tagttttgat	aatcatatct	attcttcaga	gttgacataa	540
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<210> 186
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 <213> Homo sapiens

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 <212> DNA
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 <213> Homo sapiens

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tggacattca	cagtgggtctg	cctgggcagg	atttcttctc	cottcagacc	atgagaccca	540
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<210> 189
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 <212> DNA

<213> Homo sapiens

<400> 189

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gacttgcttt	tattaccagc	ttggactcca	cagcatcctg	agtttgctag	ccagttagagt	360
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aaggggagaag	aaatcctgcc	caggcagacc	actgtgaatg	tccaggtaag	tgagagcata	540
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<210> 190

<211> 599

<212> DNA

<213> Homo sapiens

<400> 190

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ggctaattctt	ggcctcacia	aggagtgtgg	ttagagttgt	tgggtggtgg	cgatgttttc	540
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<210> 191

<211> 599

<212> DNA

<213> Homo sapiens

<400> 191

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catctttacc	taaaacatca	attttaatat	caacacagca	tttcattata	tggatacacc	420
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ctgataaagc	ctgaggactc	tgtctcagaa	tgcgacatag	taaaacgtgg	gcattatcat	540
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<210> 192

<211> 599

<212> DNA

<213> Homo sapiens

<400> 192

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taagaataaa	ataatgccat	gtaggggaata	tgtttttgag	ttagacagta	tattatgggy	300
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gtattatcca	aaattattta	gtttcatata	ataattgggt	tgtaaagtag	goagtgggtg	480
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 <213> Homo sapiens

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 tgactaattc agccccaagg acagaaggct gtatcagctg ttaagaatga aattacaaar 300
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<210> 194
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 <212> DNA
 <213> Homo sapiens

<400> 194
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<210> 195
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 <212> DNA
 <213> Homo sapiens

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 aataacacta ttctcagcca caaagatttt tcattaaaaa aaatccttgt caaatttgtt 240
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 <213> Homo sapiens

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 <213> Homo sapiens

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<212> DNA
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ctatcttttg	ctgtgtggag	atggaaagata	tttcaataca	acagaattaa	taggcttatt		420
ttgaaatcct	tctaattcct	cagtcacta	atctgagccc	tagctctggg	ccctagattg		480
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 <213> Homo sapiens

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 <213> Homo sapiens

<400> 206
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 cagctggata cttgtatttt tctaaaaatg catagccttc agttcagatg aggtattctg 240
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 <212> DNA
 <213> Homo sapiens

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tgtactgtag	cattccctaa	aatatgttct	gtggaacact	agttctagag	gatgctaaca	420
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<400> 209						60
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<210> 210
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atccagcttc	tatcctgttt	ccccagcag	tgattgtcac	agctgtgtca	tactgtgtgt	240
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 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 211						60
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tctaattcag	aaaatagaat	attgttaata	tcactccatc	aggctagaag	agaccttggg	360
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<210> 212
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 212						
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cgattttctt	tttttctttt	ttttttgtag	ggcagggtct	tactatgttg	cccagactgg	540
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<210> 213
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 213						
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<210> 214
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 214						
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<212> DNA
<213> Homo sapiens

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

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

<400> 217
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<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
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 <213> Homo sapiens

<400> 221						
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<210> 222
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 <212> DNA
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<400> 222						
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aaaaaaagtg	ttgggactac	aggcatgagc	acctgcacct	ggccagtcct	tttaaatact	240
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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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