SEQUENCE LISTING

<110> Wang, Tongtong

<120> COMPOUNDS AND METHODS FOR THERAPY OF LUNG CANCER

<130> 210121.455PC

<140> PCT
<141> 1999-03-16

<160> 172

<170> FastSEQ for Windows Version 3.0

<210> 1
<211> 315
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(315)
<223> n = A,T,C or G

<400> 1
gcagagacag actggtggtt gaacctggag gtgccaaaaa agccagctgc gggcccagga 60
cagctgccgt gagactcccg atgtcacagg cagtctgtgt ggttacagcg cccctcagtg 120
ttcatctcca gcagagacaa cggaggaggc tcccaccagg acggttctca ttatttatat 180
gttaatatgt ttgtaaactc atgtacagtt ttttttgggg gggaagcaat gggaanggta 240
naaattacaa atagaatcat ttgctgtaat ccttaaatgg caaacggtca ggccacgtga 300
aaaaaaaaaa aaaaa 315

<210> 2
<211> 380
<212> DNA
<213> Homo sapien

<400> 2
atttaggctt aagattttgt ttacccttgt tactaaggag caaattagta ttaaagtata 60
atatatataa acaaatacaa aaagttttga gtggttcagc ttttttattt ttttttaatgg 120
cataactttt aacaacactg ctctgtaatg ggttgaactg tggtactcag actgagataa 180
ctgaaatgag tggatgtata gtgttattgc ataattatcc cactatgaag caaagggact 240
ggataaattc ccagtctaga ttattagcct ttgttaacca tcaagcacct agaagaagaa 300
ttattggaaa ttttgtcctc tgtaactggc actttggggt gtgacttatc ttttgccttt 360
gtaaaaaaaa aaaaaaaaaa 380

<210> 3
<211> 346
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(346)
<223> n = A,T,C or G

<400> 3
ttgtaagtat acaattttag aaaggattaa atgttattga tcattttact gaatactgca 60
catcctcacc atacaccatc cactttccaa taacatttaa tcctttctaa aattgtaagt 120
atacaattgt actttctttg gattttcata acaaatatac catagactgt taattttatt 180
gaagtttcct taatggaatg agtcattttt gtcttgtgct tttgaggtta cctttgcttt 240
gacttccaac aatttgatca tatagtgttg agctgtggaa atctttaagt ttattctata 300
gcaataattt ctattnnnag annccnggnn naaaannann annaaa 346

<210> 4
<211> 372
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(372)
<223> n = A,T,C or G

<400> 4
actagtctca ttactccaga attatgctct tgtacctgtg tggctgggtt tcttagtcgt 60
tggtttggtt tggtttttttg aactggtatg tagggtggtt cacagttcta atgtaagcac 120
tctcttctcc aagttgtgct ttgtggggac aatcattctt tgaacattag agaggaaggc 180
agttcaagct gttgaaaaga ctattgctta tttttgtttt taaagaccta cttgacgtca 240
tgtggacagt gcacgtgcct tacgctacat cttgttttct aggaagaagg ggatgcnggg 300
aaggantggg tgctttgtga tggataaaac gnctaaataa cacaccttta cattttgaaa 360
aaaacaaaac aa 372

<210> 5
<211> 698
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(698)
<223> n = A,T,C or G

<400> 5
actagtanga tagaaacact gtgtcccgag agtaaggaga gaagctacta ttgattagag 60
cctaacccag gttaactgca agaagaggcg ggatactttc agctttccat gtaactgtat 120
gcataaagcc aatgtagtcc agtttctaag atcatgttcc aagctaactg aatcccactt 180
caatacacac tcatgaactc ctgatggaac aataacaggc ccaagcctgt ggtatgatgt 240
gcacacttgc tagactcaga aaaaatacta ctctcataaa tgggtgggag tattttgggt 300
gacaacctac tttgcttggc tgagtgaagg aatgatattc atatnttcat ttattccatg 360
gacatttagt tagtgctttt tatataccag gcatgatgct gagtgacact cttgtgtata 420
tntccaaatn ttngtncngt cgctgcacat atctgaaatc ctatattaag antttcccaa 480
natgangtcc ctggtttttc cacgccactt gatcngtcaa ngatctcacc tctgtntgtc 540
ctaaaaccnt ctnctnnang gttagacngg acctctcttc tcccttcccg aanaatnaag 600
tgtgngaaga nancencncn ccccccctncn tncnnncctng ccngctnnnc cncntgtngg 660

gggngccgcc cccgcggggg gacccccccn ttttcccc 698

<210> 6
<211> 740
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(740)
<223> n = A,T,C or G

<400> 6
actagtcaaa aatgctaaaa taatttggga gaaaatattt tttaagtagt gttatagttt 60
catgtttatc ttttattatg tnttgtgaag ttgtgtcttt tcactaatta cctatactat 120
gccaatattt ccttatatct atccataaca tttatactac atttgtaaga gaatatgcac 180
gtgaaactta acactttata aggtaaaaat gaggtttcca agatttaata atctgatcaa 240
gttcttgtta tttccaaata gaatggactt ggtctgttaa ggggctaagg gagaagaaga 300
agataaggtt aaaagttgtt aatgaccaaa cattctaaaa gaaatgcaaa aaaaaattta 360
ttttcaagcc ttcgaactat ttaaggaaag caaaatcatt tcctanatgc atatcatttg 420
tgaganttte tcantaatat cctgaatcat tcatttcagc tnaggcttca tgttgactcg 480
atatgtcatc tagggaaagt ctatttcatg gtccaaacct gttgccatag ttggtnaggc 540
tttcctttaa ntgtgaanta ttnacangaa attttctctt tnanagttct tnatagggtt 600
aggggtgtgg gaaaagcttc taacaatctg tagtgttncg tgttatctgt ncagaaccan 660
aatnacggat cgnangaagg actgggtcta tttacangaa cgaatnatct ngttnnntgt 720
gtnnncaact ccngggagcc 740

<210> 7
<211> 670
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(670)
<223> n = A,T,C or G

<400> 7
gctggggagc tcggcatggc ggtccccgct gcagccatgg ggccctcggc gttgggccag 60
agcggccccg gctcgatggc cccgtggtgc tcagtgagca gcggcccgtc gcgctacgtg 120
cttgggatgc aggagctgtt ccggggccac agcaagaccg cgagttcctg gcgcacagcg 180
ccaaggtgca ctcggtggcc tggagttgcg acgggcgtcg cctacctcgg ggtcttcgac 240
aagacgccac gtcttcttgc tgganaanga ccgttggtca aagaaaacaa ttatcgggga 300
catggggata gtgtggacca ctttgttggc atccaagtaa tcctgaccta tttgttacgg 360
cgtctggaga taaaaccatt cgcatctggg atgtgaggac tacaaaatgc attgccactg 420
tgaacactaa aggggagaac attaatatct gctggantcc tgatgggcan accattgctg 480
tagcnacaag gatgatgtgg tgactttatt gatgccaaga aaccccgttc caaagcaaaa 540
aaacanttcc aanttcgaag tcaccnaaat ctcctggaac aatgaacatn aatatnttct 600
tcctgacaat ggnccttggg tgtntcacat cctcagctnc cccaaaactg aancctgtnc 660
natccacccc 670

<210> 8
<211> 689
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(689)
<223> n = A,T,C or G

<400> 8
actagtatct aggaatgaac agtaaaagag gagcagttgg ctacttgatt acaacagagt 60
aaatgaagta ctggatttgg gaaaacctgg ttttattaga acatatggaa tgaaagccta 120
cacctagcat tgcctactta gccccctgaa ttaacagagc ccaattgaga caaacccctg 180
gcaacaggaa attcaaggga gaaaaagtaa gcaacttggg ctaggatgag ctgactccct 240
tagagcaaag ganagacagc ccccattacc aaataccatt tttgcctggg gcttgtgcag 300
ctggcagtgt tcctgcccca gcatggcacc ttatngtttt gatagcaact tcgttgaatt 360
ttcaccaact tattacttga aattataata tagcctgtcc gtttgctgtn tccaggctgt 420
gatatatntt cctagtggtt tgactttnaa aataaatnag gtttantttt ctcccccnn 480
cnntnctncc nntcnctcnn cnntcccccc cnctcngtcc tccnnnnnttn gggggggccn 540
ccccccnggn ggaccccccc ttggtccctt agtggaggtt natggccccc ggnnttatcc 600
nggccntann tttccccgtn nnaaatgntt ccccctccca ntcccnccac ctcaanccgg 660
aagcctaagt ttntaccctg ggggtcccc 689

<210> 9
<211> 674
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(674)
<223> n = A,T,C or G

<400> 9
gtccactctc ctttgagtgt actgtcttac tgtgcactct gtttttcaac tttctagata 60
taaaaaatgc ttgttctata gtggagtaag agctcacaca cccaaggcag caagataact 120
gaaaaaagcg aggctttttt gccaccttgg taaaggccag ttcactgcta tagaactgct 180
ataagcctga agggaagtag ctatgagact ttccattttt cttagttctc ccaataggct 240
ccttcatgga aaaaggcttc ctgtaataat tttcacctaa tgaattagca gtgtgattat 300
ttctgaaata agagacaaat tgggccgcag agtcttcctg tgatttaaaa taaacaaccc 360
aaagttttgt ttggtcttca ccaaaggaca tactctaggg ggtatgttgt tgaagacatt 420
caaaaacatt agctgttctg tctttcaatt tcaagttatt ttggagactg cctccatgtg 480
agttaattac tttgctctgg aactagcatt attgtcatta tcatcacatt ctgtcatcat 540
catctgaata atattgtgga tttccccctc tgcttgcatc ttcttttgac tcctctggga 600
anaaatgtca aaaaaaaagg tcgatctact cngcaaggnc catctaatca ctgcgctgga 660
aggacccnct gccc 674

<210> 10
<211> 346
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(346)
<223> n = A,T,C or G

<400> 10

<221> misc_feature
<222> (1)...(694)
<223> n = A,T,C or G

<400> 13
cactagtcac tcattagcgt tttcaatagg gctcttaagt ccagtagatt acgggtagtc 60
agttgacgaa gatctggttt acaagaacta attaaatgtt tcattgcatt tttgtaagaa 120
cagaataatt ttataaaatg tttgtagttt ataattgccg aaaataattt aaagacactt 180
tttctctgtg tgtgcaaatg tgtgtttgtg atccattttt ttttttttt taggacacct 240
gtttactagc tagctttaca atatgccaaa aaaggatttc tccctgaccc catccgtggt 300
tcaccctctt ttccccccat gctttttgcc ctagtttata acaaaggaat gatgatgatt 360
taaaaagtag ttctgtatct tcagtatctt ggtcttccag aaccctctgg ttgggaaggg 420
gatcattttt tactggtcat ttccctttgg agtgtactac tttaacagat ggaaagaact 480
cattggccat ggaaacagcc gangtgttgg gagccagcag tgcatggcac cgtccggcat 540
ctggcntgat tggtctggct gccgtcattg tcagcacagt gccatgggac atggggaana 600
ctgactgcac ngccaatggt tttcatgaag aatacngcat ncncngtgat cacgtnancc 660
angacgctat gggggncana gggccanttg cttc 694

<210> 14
<211> 679
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(679)
<223> n = A,T,C or G

<400> 14
cagccgcctg catctgtatc cagcgccang tcccgccagt cccagctgcg cgcgcccccc 60
agtcccgnac ccgttcggcc cangctnagt tagncctcac catnccggtc aaaggangca 120
ccaagtgcat caaatacctg cngtncggat ntaaattcat cttctggctt gccgggattg 180
ctgtccntgc cattggacta nggctccgat ncgactctca gaccanganc atcttcganc 240
naganactaa tnatnattnt tccagcttct acacaggagt ctatattctg atcggatccg 300
gcnccctcnt gatgctggtg ggcttcctga gctgctgcgg ggctgtgcaa gagtcccant 360
gcatgctggg actgttcttc ggcttcntct tggtgatatn cgccattgaa atacctgcgg 420
ccatctgggg atattccact ncgatnatgt gattaaggaa ntccacggag ttttacaagg 480
acacgtacaa cnacctgaaa accnnggatg anccccaccg ggaancnctg aangccatcc 540
actatgcgtt gaactgcaat ggtttggctg gggnccttga acaatttaat cncatacatc 600
tggccccann aaaggacntn ctcganncct tcnccgtgna attcngttct gatnccatca 660
cagaagtctc gaacaatcc 679

<210> 15
<211> 695
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(695)
<223> n = A,T,C or G

<400> 15
actagtggat aaaggccagg gatgctgctc aacctcctac catgtacagg gacgtcccc 60
cattacaact acccaatccg aagtgtcaac tgtgtcagga ctaanaaacc ctggttttga 120

actagtctgc tgatagaaag cactatacat cctattgttt ctttctttcc aaaatcagcc 60
ttctgtctgt aacaaaaatg tactttatag agatggagga aaaggtctaa tactacatag 120
ccttaagtgt ttctgtcatt gttcaagtgt attttctgta acagaaacat atttggaatg 180
ttttttcttt ccccttataa attgtaattc ctgaaatact gctgctttaa aaagtcccac 240
tgtcagatta tattatctaa caattgaata ttgtaaatat acttgtctta cctctcaata 300
aaagggtact tttctattan nnagnngnnn gnnnnataaa anaaaa 346

<210> 11
<211> 602
<212> DNA
<213> Homo sapien

<400> 11
actagtaaaa agcagcattg ccaaataatc cctaattttc cactaaaaat ataatgaaat 60
gatgttaagc tttttgaaaa gtttaggtta aacctactgt tgttagatta atgtatttgt 120
tgcttcccct tatctggaat gtggcattag ctttttttatt ttaaccctct ttaattctta 180
ttcaattcca tgacttaagg ttggagagct aaacactggg atttttggat aacagactga 240
cagttttgca taattataat cggcattgta catagaaagg atatggctac cttttgttaa 300
atctgcactt tctaaaatatc aaaaaaggga aatgaagtta taaatcaatt tttgtataat 360
ctgtttgaaa catgagtttt atttgcttaa tattagggct ttgccccttt tctgtaagtc 420
tcttgggatc ctgtgtagaa ctgttctcat taaacaccaa acagttaagt ccattctctg 480
gtactagcta caaattcggt ttcatattct acttaacaat ttaaataaac tgaaatattt 540
ctagatggtc tacttctgtt catataaaaa caaaacttga tttccaaaaa aaaaaaaaaa 600
aa 602

<210> 12
<211> 685
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(685)
<223> n = A,T,C or G

<400> 12
actagtcctg tgaaagtaca actgaaggca gaaagtgtta ggattttgca tctaatgttc 60
attatcatgg tattgatgga cctaagaaaa taaaaattag actaagcccc caaataagct 120
gcatgcattt gtaacatgat tagtagattt gaatatatag atgtagtatn ttgggtatct 180
aggtgtttta tcattatgta aaggaattaa agtaaaggac tttgtagttg tttttattaa 240
atatgcatat agtagagtgc aaaaatatag caaaaatana aactaaaggt agaaaagcat 300
tttagatatg ccttaatnta nnaactgtgc caggtggccc tcggaataga tgccaggcag 360
agaccagtgc ctgggtggtg cctccccttg tctgcccccc tgaagaactt ccctcacgtg 420
angtagtgcc ctcgtaggtg tcacgtggan tantgggganc aggccgnncn gtnanaagaa 480
ancanngtga nagtttcncc gtngangcng aactgtccct gngccnnnac gctcccanaa 540
cntntccaat ngacaatcga gttttcnnnc tccngnaacc tngccgnnnn cnngcccnnc 600
cantntgnta accccgcgcc cggatcgctc tcnnntcgtt ctcncncnaa ngggnttttn 660
cnnccgccgt cncnnccccg cnncc 685

<210> 13
<211> 694
<212> DNA
<213> Homo sapien

<220>

ttaaaaaagg gcctgaaaaa aggggagcca caaatctgtc tgcttcctca cnttantcnt 180
tggcaaatna gcattctgtc tcnttggctg cngcctcanc ncaaaaaanc ngaactcnat 240
cnggcccagg aatacatctc ncaatnaacn aaattganca aggcnntggg aaatgccnga 300
tgggattatc ntccgcttgt tgancttcta agtttcnttc ccttcattcn accctgccag 360
ccnagttctg ttagaaaaat gccngaattc naacnccggt tttcntactc ngaatttaga 420
tctncanaaa cttcctggcc acnattcnaa ttnanggnca cgnacanatn ccttccatna 480
ancncacccc acntttgana gccangacaa tgactgcntn aantgaaggc ntgaaggaan 540
aactttgaaa ggaaaaaaaa ctttgtttcc ggcccccttcc aacncttctg tgttnancac 600
tgccttctng naaccctgga agcccngnga cagtgttaca tgttgttcta nnaaacngac 660
ncttnaatnt cnatcttccc nanaacgatt ncncc 695

<210> 16
<211> 669
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(669)
<223> n = A,T,C or G

<400> 16
cgccgaagca gcagcgcagg ttgtccccgt ttcccctccc ccttcccttc tccggttgcc 60
ttcccgggcc ccttacactc cacagtcccg gtcccgccat gtcccagaaa caagaagaag 120
agaaccctgc ggaggagacc ggcgaggaga agcaggacac gcaggagaaa gaaggtattc 180
tgcctgagag agctgaagag gcaaagctaa aggccaaata cccaagccta ggacaaaagc 240
ctggaggctc cgacttcctc atgaagagac tccagaaagg gcaaaagtac tttgactcng 300
gagactacaa catggccaaa gccaacatga agaataagca gctgccaagt gcangaccag 360
acaagaaccc ggtgactggt gatcacatcc ccacccccaca ggatctgccc agagaaagtc 420
ctcgctcgtc accagcaagc ttgcgggtgg ccaagttgaa tgatgctgcc ggggctctgc 480
canatctgag acgcttcccc ccctgcccca cccgggtcct gtgctggctc ctgccccttcc 540
tgcttttgca gccangggtc aggaagtggc ncnggtngtg gctggaaagc aaaaccccttt 600
cctgttggtg tcccacccat ggagcccctg gggcgagccc angaacttga ncctttttgt 660
tntcttncc 669

<210> 17
<211> 697
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(697)
<223> n = A,T,C or G

<400> 17
gcaagatatg gacaactaag tgagaaggta atnctctact gctctagntn ctccnggcnn 60
gacgcgctga ggagannnac gctggcccan ctgccggcca cacacgggga tcntggtnat 120
gcctgcccan gggancccca ncnctcggan cccatntcac acccgnnccn tncgcccacn 180
ncctggctcn cncngcccng nccagctcnc gnccccctcc gccnnnnctcn ttnncntctc 240
cncncccctcc ncnacnacct cctacccncg gctccctccc cagccccccc ccgcaancct 300
ccacnacncc ntcnncncga ancnccnctc gcnctcngcc ccngccccct gccccccgcc 360
cncnacnncg cgntcccccg cgcncgcngc ctcncccccc cccacnacag ncncacccgc 420
agncacgcnc tccgcccnct gacgcccnnn cccgccgcgc tcaccttcat ggnccnacng 480
cccccgctcnc ncccctgcnc gccgncnngg cgccccgccc cnncccgngtn ccncncgnng 540

ccccngcngn angcngtgcg cnncangncc gngccgnncn ncaccctccg nccnccgccc 600
cgcccgctgg gggctcccgc cncgcggntc antccccncc cntncgccca ctntccgntc 660
cnncnctcnc gctcngcgcn cgcccncccc ccccccc 697

<210> 18
<211> 670
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(670)
<223> n = A,T,C or G

<400> 18
ctcgtgtgaa gggtgcagta cctaagccgg agcggggtag aggcgggccg gcacccccct 60
ctgacctcca gtgccgccgg cctcaagatc agacatggcc cagaacttga acgacttggc 120
gggacggctg cccgccgggc cccggggcat gggcacggcc ctgaagctgt tgctgggggc 180
cggcgccgtg gcctacggtg tgcgcgaatc tgtgttcacc gtggaaggcg ggcncagagc 240
catcttcttc aatcggatcg gtggagtgca caggacacta tcctgggccg anggccttca 300
cttcaggatc cttggttcca gtaccccanc atctatgaca ttcgggccag acctcgaaaa 360
aatctcctcc ctacaggctc caaagaccta cagatggtga atatctcccc gcgagtgttg 420
tctcgaccaa tgctcangaa cttcctaaca tgttccancg cctaagggct ggactacnaa 480
gaacgantgt tgccgtccat tgtcacgaag tgctcaagaa tttnggtggc caagttcaat 540
gncctcacnn ctgatcnccc agcggggcca agttancccc ggttgatccc cgggganctg 600
acnnaaaagg gccaaggact tcccctcatc ctggataatg tggccntcac aaagctcaac 660
tttanccacc 670

<210> 19
<211> 606
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(606)
<223> n = A,T,C or G

<400> 19
actagtgcca acctcagctc ccaggccagt tctctgaatg tcgaggagtt ccaggatctc 60
tggcctcagt tgtccttggt tattgatggg ggacaaattg gggatggcca gagccccgag 120
tgtcgccttg gctcaactgt ggttgatttg tctgtgcccg gaaagtttgg catcattcgt 180
ccaggctgtg ccctggaaag tactacagcc atcctccaac agaagtacgg actgctcccc 240
tcacatgcgt cctacctgtg aaactctggg aagcaggaag gcccaagacc tggtgctgga 300
tactatgtgt ctgtccactg acgactgtca aggcctcatt tgcagaggcc accggagcta 360
gggcactagc ctgacttttа aggcagtgtg tctttctgag cactgtagac caagcccttg 420
gagctgctgg tttagccttg cacctgggga aaggatgtat ttatttgtat tttcatatac 480
cagccaaaag ctgaatggaa aagttnagaa cattcctagg tggccttatt ctaataagtt 540
tcttctgtct gttttgtttt tcaattgaaa agttattaaa taacagattt agaatctagt 600
gagacc 606

<210> 20
<211> 449
<212> DNA
<213> Homo sapien

<400> 20
actagtaaac aacagcagca gaaacatcag tatcagcagc gtcgccagca ggagaatatg 60
cagcgccaga gccgaggaga acccccgctc cctgaggagg acctgtccaa actcttcaaa 120
ccaccacagc cgcctgccag gatggactcg ctgctcattg caggccagat aaacacttac 180
tgccagaaca tcaaggagtt cactgcccaa aacttaggca agctcttcat ggcccaggct 240
cttcaagaat acaacaacta agaaaaggaa gtttccagaa aagaagttaa catgaactct 300
tgaagtcaca ccagggcaac tcttggaaga aatatatttg catattgaaa agcacagagg 360
atttctttag tgtcattgcc gattttggct ataacagtgt ctttctagcc ataataaaat 420
aaaacaaaat cttgactgct tgctcaaaa 449

<210> 21
<211> 409
<212> DNA
<213> Homo sapien

<400> 21
tatcaatcaa ctggtgaata attaaacaat gtgtggtgtg atcatacaaa gggtaccact 60
caatgataaa aggaacaagc tgcctatatg tggaacaaca tggatgcatt tcagaaactt 120
tatgttgagt gaaagaacaa acacggagaa catactatgt ggttctcttt atgtaacatt 180
acagaaataa aaacagaggc aaccaccttt gaggcagtat ggagtgagat agactggaaa 240
aaggaaggaa ggaaactcta cgctgatgga aatgtctgtg tcttcattgg gtggtagtta 300
tgtggggata tacatttgtc aaaatttatt gaactatata ctaaagaact ctgcatttta 360
ttgggatgta aataatacct caattaaaaa gacaaaaaaa aaaaaaaaa 409

<210> 22
<211> 649
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(649)
<223> n = A,T,C or G

<400> 22
acaattttca ttatcttaag cacattgtac atttctacag aacctgtgat tattctcgca 60
tgataaggat ggtacttgca tatggtgaat tactactgtt gacagtttcc gcagaaatcc 120
tatttcagtg gaccaacatt gtggcatggc agcaaatgcc aacattttgt ggaatagcag 180
caaatctaca agagaccctg gttggttttt cgttttgttt tctttgtttt ttccccttc 240
tcctgaatca gcagggatgg aangagggta gggaagttat gaattactcc ttccagtagt 300
agctctgaag tgtcacattt aatatcagtt ttttttaaac atgattctag ttnaatgtag 360
aagagagaag aaagaggaag tgttcacttt tttaatacac tgatttagaa atttgatgtc 420
ttatatcagt agttctgagg tattgatagc ttgctttatt tctgccttta cgttgacagt 480
gttgaagcag ggtgaataac taggggcata tatatttttt ttttttgtaa gctgtttcat 540
gatgttttct ttggaatttc cggataagtt caggaaaaca tctgcatgtt gttatctagt 600
ctgaagttcn tatccatctc attacaacaa aaacncccag aacggnttg 649

<210> 23
<211> 669
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature

<222> (1)...(669)
<223> n = A,T,C or G

<400> 23
actagtgccg tactggctga aatccctgca ggaccaggaa gagaaccagt tcagactttg 60
tactctcagt caccagctct ggaattagat aaattccttg aagatgtcag gaatgggatc 120
tatcctctga cagcctttgg gctgcctcgg ccccagcagc cacagcagga ggaggtgaca 180
tcacctgtcg tgccccctc tgtcaagact ccgacacctg aaccagctga ggtggagact 240
cgcaaggtgg tgctgatgca gtgcaacatt gagtcggtgg aggagggagt caaacaccac 300
ctgacacttc tgctgaagtt ggaggacaaa ctgaaccggc acctgagctg tgacctgatg 360
ccaaatgaga atatccccga gttggcggct gagctggtgc agctgggctt cattagtgag 420
gctgaccaga gccggttgac ttctctgcta gaagagactt gaacaagttc aattttgcca 480
ggaacagtac cctcaactca gccgctgtca ccgtctcctc ttagagctca ctcgggccag 540
gccctgatct gcgctgtggc tgtcctggac gtgctgcacc ctctgtcctt ccccccagtc 600
agtattacct gtgaagccct tccctccttt attattcagg anggctgggg gggctccttg 660
nttctaacc 669

<210> 24
<211> 442
<212> DNA
<213> Homo sapien

<400> 24
actagtacca tcttgacaga ggatacatgc tcccaaaacg tttgttacca cacttaaaaa 60
tcactgccat cattaagcat cagtttcaaa attatagcca ttcatgattt actttttcca 120
gatgactatc attattctag tcctttgaat ttgtaagggg aaaaaaaaca aaaacaaaaa 180
cttacgatgc acttttctcc agcacatcag atttcaaatt gaaaattaaa gacatgctat 240
ggtaatgcac ttgctagtac tacacacttt ggtacaacaa aaaacagagg caagaaacaa 300
cggaaagaga aaagccttcc tttgttggcc cttaaactga gtcaagatct gaaatgtaga 360
gatgatctct gacgatacct gtatgttctt attgtgtaaa taaaattgct ggtatgaaat 420
gacctaaaaa aaaaaaaaga aa 442

<210> 25
<211> 656
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(656)
<223> n = A,T,C or G

<400> 25
tgcaagtacc acacactgtt tgaattttgc acaaaaagtg actgtaggat caggtgatag 60
ccccggaatg tacagtgtct tggtgcacca agatgccttc taaaggctga cataccttgg 120
accctaatgg ggcagagagt atagccctag cccagtggtg acatgaccac tccctttggg 180
aggcctgagg tagaggggag tggtatgtgt tttctcagtg gaagcagcac atgagtgggt 240
gacaggatgt tagataaagg ctctagttag ggtgtcattg tcatttgaga gactgacaca 300
ctcctagcag ctggtaaagg ggtgctggan gccatggagg anctctagaa acattagcat 360
gggctgatct gattacttcc tggcatcccg ctcacttta tgggaagtct tattagangg 420
atgggacagt tttccatatc cttgctgtgg agctctggaa cactctctaa atttcccctt 480
attaaaaatc actgccctaa ctacacttcc tccttgaagg aatagaaatg gaacttttc 540
tgacatantt cttggcatgg ggagccagcc acaaatgana atctgaacgt gtccaggttt 600
ctcctganac tcatctacat agaattggtt aaaccctccc ttggaataag gaaaaa 656

<210> 26
<211> 434
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(434)
<223> n = A,T,C or G

<400> 26
actagttcag actgccacgc caaccccaga aaatacccca catgccagaa aagtgaagtc 60
ctaggtgttt ccatctatgt ttcaatctgt ccatctacca ggcctcgcga taaaaacaaa 120
acaaaaaaac gctgccaggt tttagaagca gttctggtct caaaaccatc aggatcctgc 180
caccagggtt cttttgaaat agtaccacat gtaaaaggga atttggcttt cacttcatct 240
aataactgaa ttgtcaggct ttgattgata attgtagaaa taagtagcct tctgttgtgg 300
gaataagtta taatcagtat tcatctcttt gttttttgtc actcttttct ctctaattgt 360
gtcatttgta ctgtttgaaa aatatttctt ctatnaaatt aaactaacct gccttaaaaa 420
aaaaaaaaaa aaaa 434

<210> 27
<211> 654
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(654)
<223> n = A,T,C or G

<400> 27
actagtccaa cacagtcaga aacattgttt tgaatcctct gtaaaccaag gcattaatct 60
taataaacca ggatccattt aggtaccact tgatataaaa aggatatcca taatgaatat 120
tttatactgc atcctttaca ttagccacta aatacgttat tgcttgatga agacctttca 180
cagaatccta tggattgcag catttcactt ggctacttca tacccatgcc ttaaagaggg 240
gcagtttctc aaaagcagaa acatgccgcc agttctcaag ttttcctcct aactccattt 300
gaatgtaagg gcagctggcc cccaatgtgg ggaggtccga acattttctg aattcccatt 360
ttcttgttcg cggctaaatg acagtttctg tcattactta gattccgatc tttcccaaag 420
gtgttgattt acaaagaggc cagctaatag cagaaatcat gaccctgaaa gagagatgaa 480
attcaagctg tgagccaggc agganctcag tatggcaaag gtcttgagaa tcngccattt 540
ggtacaaaaa aaattttaaa gcntttatgt tataccatgg aaccatagaa anggcaaggg 600
aattgttaag aanaatttta agtgtccaga cccanaanga aaaaaaaaaa aaaa 654

<210> 28
<211> 670
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(670)
<223> n = A,T,C or G

<400> 28
cgtgtgcaca tactgggagg atttccacag ctgcacggtc acagcccttа cggattgcca 60

ggaaggggcg aaagatatgt gggataaact gagaaaagaa nccaaaaacc tcaacatcca 120
aggcagctta ttcgaactct gcggcagcgg caacggggcg gcggggtccc tgctcccggc 180
gttcccggtg ctcctggtgt ctctctcggc agctttagcg acctgncttt ccttctgagc 240
gtggggccag ctccccccgc ggcgcccacc cacnctcact ccatgctccc ggaaatcgag 300
aggaagatca ttagttcttt ggggacgttn gtgattctct gtgatgctga aaaacactca 360
tatagggaat gtgggaaatc ctganctctt tnttatntcg tntgatttct tgtgttttat 420
ttgccaaaat gttaccaatc agtgaccaac cnagcacagc caaaaatcgg acntcngctt 480
tagtccgtct tcacacacag aataagaaaa cggcaaaccc accccacttt tnantttnat 540
tattactaan ttttttctgt tgggcaaaag aatctcagga acngccctgg ggccnccgta 600
ctanagttaa ccnagctagt tncatgaaaa atgatgggct ccnccтcaat gggaaagcca 660
agaaaaagnc 670

<210> 29
<211> 551
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(551)
<223> n = A,T,C or G

<400> 29
actagtcctc cacagcctgt gaatcccccт agacctttca agcatagtga gcggagaaga 60
agatctcagc gtttagccac cttacccatg cctgatgatt ctgtagaaaa ggtttcttct 120
ccctctccag ccactgatgg gaaagtattc tccatcagtt ctcaaaatca gcaagaatct 180
tcagtaccag aggtgcctga tgttgcacac ttgccacttg agaagctggg accctgtctc 240
cctcttgact taagtcgtgg ttcagaagtt acagcaccgg tagcctcaga ttcctcttac 300
cgtaatgaat gtcccagggc agaaaaagag gatacncaga tgcttccaaa tcctttcttcc 360
aaagcaatag ctgatgggaa gaggagctcc agcagcagca ggaatatcga aaacagaaaa 420
aaaagtgaaa ttgggaagac aaaagctcaa cagcatttgg taaggagaaa aganaagatg 480
aggaaggaag agagaagaga gacnaagatc nctacggacc gnnncggaag aagaagaagn 540
aaaaaanaaa a 551

<210> 30
<211> 684
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(684)
<223> n = A,T,C or G

<400> 30
actagttcta tctggaaaaa gcccgggttg gaagaagctg tggagagtgc gtgtgcaatg 60
cgagactcat ttcttggaag catccctggc aaaaatgcag ctgagtacaa ggttatcact 120
gtgatagaac ctggactgct ttttgagata atagagatgc tgcagtctga agagacttcc 180
agcacctctc agttgaatga attaatgatg gcttctgagt caactttact ggctcaggaa 240
ccacgagaga tgactgcaga tgtaatcgag cttaaaggga aattcctcat caacttagaa 300
ggtggtgata ttcgtgaaga gtcttcctat aaagtaattg tcatgccgac tacgaaagaa 360
aaatgccccc gttgttggaa gtatacagcg ggagtcttca gatacactgt gtcctcgatg 420
tgcagaagtt gtcagtggga aaatagtatt aacagctcac tcgagcaaga accctcctga 480
cagtactggg ctagaagttt ggatggatta tttacaatat aggaaagaaa gccaagaatt 540
aggtnatgag tggatgagta aatggtggan gatggggaat tcaaatcaga attatggaag 600

aagttnttcc tgttactata gaaaggaatt atgtttattt acatgcagaa aatatanatg 660
tgtggtgtgt accgtggatg gaan 684

<210> 31
<211> 654
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(654)
<223> n = A,T,C or G

<400> 31
gcgcagaaaa ggaaccaata tttcagaaac aagcttaata ggaacagctg cctgtacatc 60
aacatcttct cagaatgacc cagaagttat catcgtggga gctggcgtgc ttggctctgc 120
tttggcagct gtgctttcca gagatggaag aaaggtgaca gtcattgaga gagacttaaa 180
agagcctgac agaatagttg gagaattcct gcagccgggt ggttatcatg ttctcaaaga 240
ccttggtctt ggagatacag tggaaggtcc tgatgcccag gttgtaaatg gttacatgat 300
tcatgatcag ggaaagcaaa tcagangttc agattcctta ccctctgtca gaaaacaatc 360
aagtgcagag tggaagagct ttccatcacg gaagattcat catgagtctc cggaaagcag 420
ctatggcaga gcccaatgca aagtttattg aaggtgttgt gttacagtta ttagaggaag 480
atgatgttgt gatgggagtt cagtacaagg ataaagagac tgggagatat caaggaactc 540
catgctccac tgactgttgt tgcagatggg cttttctcca anttcaggaa aagcctggtc 600
tcaataaagt ttctgtatca ctcatttggt tggcttctta tgaagaatgc nccc 654

<210> 32
<211> 673
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(673)
<223> n = A,T,C or G

<400> 32
actagtgaag aaaaagaaat tctgatacgg gacaaaaatg ctcttcaaaa catcattctt 60
tatcacctga caccaggagt tttcattgga aaaggatttg aacctggtgt tactaacatt 120
ttaaagacca cacaaggaag caaaatcttt ctgaaagaag taaatgatac acttctggtg 180
aatgaattga aatcaaaaga atctgacatc atgacaacaa atggtgtaat tcatgttgta 240
gataaactcc tctatccagc agacacacct gttggaaatg atcaactgct ggaaatactt 300
aataaattaa tcaaatacat ccaaattaag tttgttcgtg gtagcacctt caaagaaatc 360
cccgtgactg tctatnagcc aattattaaa aaatacacca aaatcattga tgggagtgcc 420
tgtgggaaat aactgaaaaa gagaccgaga agaacgaatc attacaggtc ctgaaataaa 480
atacctagga tttctactgg aggtggagaa acagaagaac tctgaagaaa ttgttacaag 540
aagangtccc aaggtcacca aattcattga aggtggtgat ggtctttatt tgaagatgaa 600
gaaattaaaa gacgcttcag ggagacnccc catgaaggaa ttgccagcca caaaaaaatt 660
cagggattag aaa 673

<210> 33
<211> 673
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(673)
<223> n = A,T,C or G

<400> 33
actagttatt tactttcctc cgcttcagaa ggtttttcag actgagagcc taagcatact 60
ggatctgttg tttcttttgg gtctcacctc atcagtgtgc atagtggcag aaattataaa 120
gaaggttgaa aggagcaggg aaaagatcca gaagcatgtt agttcgacat catcatcttt 180
tcttgaagta tgatgcatat tgcattattt tatttgcaaa ctaggaattg cagtctgagg 240
atcatttaga agggcaagtt caagaggata tgaagatttg agaacttttt aactattcat 300
tgactaaaaa tgaacattaa tgttnaagac ttaagacttt aacctgctgg cagtcccaaa 360
tgaaattatg caactttgat atcatattcc ttgatttaaa ttgggctttt gtgattgant 420
gaaactttat aaagcatatg gtcagttatt tnattaaaaa ggcaaaacct gaaccacctt 480
ctgcacttaa agaagtctaa cagtacaaat acctatctat cttagatgga tntatttntt 540
tntattttta aatattgtac tatttatggt nggtggggct ttcttactaa tacacaaatn 600
aatttatcat ttcaanggca ttctatttgg gtttagaagt tgattccaag nantgcatat 660
ttcgctactg tnt 673

<210> 34
<211> 684
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(684)
<223> n = A,T,C or G

<400> 34
actagtttat tcaagaaaag aacttactga ttcctctgtt cctaaagcaa gagtggcagg 60
tgatcagggc tggtgtagca tccggttcct ttagtgcagc taactgcatt tgtcactgat 120
gaccaaggag gaaatcacta agacatttga gaagcagtgg tatgaacgtt cttggacaag 180
ccacagttct gagccttaac cctgtagttt gcacacaaga acgagctcca cctccccttc 240
ttcaggagga atctgtgcgg atagattggc tggacttttc aatggttctg ggttgcaagt 300
gggcactgtt atggctgggt atggagcgga cagccccagg aatcagagcc tcagcccggc 360
tgcctggttg gaaggtacag gtgttcagca ccttcggaaa aagggcataa agtngtgggg 420
gacaattctc agtccaagaa gaatgcattg accattgctg gctatttgct tncctagtan 480
gaattggatn catttttgac cangatnntt ctnctatgct ttnttgcaat gaaatcaaat 540
cccgcattat ctacaagtgg tatgaagtcc tgcnnccccc agagaggctg ttcaggcnat 600
gtcttccaag ggcagggtgg gttacaccat tttacctccc ctctcccccc agattatgna 660
cncagaagga atttntttcc tccc 684

<210> 35
<211> 614
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(614)
<223> n = A,T,C or G

<400> 35
actagtccaa cgcgttngcn aatattcccc tggtagccta cttccttacc cccgaatatt 60

ggtaagatcg agcaatggct tcaggacatg ggttctcttc tcctgtgatc attcaagtgc 120
tcactgcatg aagactggct tgtctcagtg tntcaacctc accagggctg tctcttggtc 180
cacacctcgc tcccctgttag tgccgtatga cagcccccat canatgacct tggccaagtc 240
acggtttctc tgtggtcaat gttggtnggc tgattggtgg aaagtanggt ggaccaaagg 300
aagncncgtg agcagncanc nccagttctg caccagcagc gcctccgtcc tactngggtg 360
ttccngtttc tcctggccct gngtgggcta nggcctgatt cgggaanatg cctttgcang 420
gaaggganga taantgggat ctaccaattg attctggcaa aacnatntct aagattnttn 480
tgctttatgt ggganacana tctanctctc atttnntgct gnanatnaca ccctactcgt 540
gntcgancnc gtcttcgatt ttcgganaca cnccantnaa tactggcgtt ctgttgttaa 600
aaaaaaaaaa aaaa 614

<210> 36
<211> 686
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(686)
<223> n = A,T,C or G

<400> 36
gtggctggcc cggttctccg cttctcccca tcccctactt tcctcccctcc ctccctttcc 60
ctcctcgtc gactgttgct tgctggtcgc agactcccctg acccctcccc caccccctccc 120
taacctcggt gccaccggat tgcccttctt ttcctgttgc ccagcccagc cctagtgtca 180
gggcgggggc ctggagcagc ccgaggcact gcagcagaag ananaaaaga cacgacnaac 240
ctcagctcgc cagtccggtc gctngcttcc cgccgcatgg caatnagaca gacgccgctc 300
acctgctctg ggcacacgcg acccgtggtt gatttggcct tcagtggcat caccccttatg 360
ggtatttctt aatcagcgct tgcaaagatg gttaacctat gctacgccag ggagatacag 420
gagactggat tggaacattt ttggggtcta aaggtctgtt tggggtgcaa cactgaataa 480
ggatgccacc aaagcagcta cagcagctgc agatttcaca gcccaagtgt gggatgctgt 540
ctcagganat naattgataa cctggctcat aacacattgt caagaatgtg gatttcccca 600
ggatattatt atttgtttac cgggggganag gataactgtt tcncntattt taattgaaca 660
aactnaaaca aaanctaagg aaatcc 686

<210> 37
<211> 681
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(681)
<223> n = A,T,C or G

<400> 37
gagacanacn naacgtcang agaanaaaag angcatggaa cacaanccag gcncgatggc 60
caccttccca ccagcancca gcgcccccca gcngcccccca ngnccggang accangactc 120
cancctgnat caatctganc tctattcctg gcccatnccc acctcggagg tggangccgn 180
aaaggtcgca cnnncagaga agctgctgcc ancaccancc gccccnnccc tgncgggctn 240
nataggaaac tggtgaccnn gctgcanaat tcatacagga gcacgcgang ggcacnnnct 300
cacactgagt tnnngatgan gcctnaccan ggacctnccc cagcnnattg annacnggac 360
tgcggaggaa ggaagacccc gnacnggatc ctggccggcn tgccaccccc ccacccctag 420
gattatnccc cttgactgag tctctgaggg gctaccccgaa cccgcctcca ttcccctacca 480
natnntgctc natcgggact gacangctgg ggatnggagg ggctatcccc cancatcccc 540

tnanaccaac agcnacngan natnggggct ccccngggtc ggngcaacnc tcctncaccc 600
cggcgcnggc cttcggtgnt gtcctccntc aacnaattcc naaanggcgg gccccccngt 660
ggactcctcn ttgttccctc c 681

<210> 38
<211> 687
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(687)
<223> n = A,T,C or G

<400> 38
canaaaaaaa aaaacatggc cgaaaccagn aagctgcgcg atggcgccac ggcccctctt 60
ctcccggcct gtgtccggaa ggtttccctc cgaggcgccc cggctcccgc aagcggagga 120
gagggcggga cntgccgggg ccggagctca naggccctgg ggccgctctg ctctcccgcc 180
atcgcaaggg cggcgctaac ctnaggcctc cccgcaaagg tccccnangc ggnggcggcg 240
gggggctgtg anaaccgcaa aaanaacgct gggcgcgcng cgaacccgtc cacccccgcg 300
aaggananac ttccacagan gcagcgtttc cacagcccan agccacnttt ctagggtgat 360
gcaccccagt aagttcctgn cggggaagct caccgctgtc aaaaaanctc ttcgctccac 420
cggcgcacna aggggangan ggcangangc tgccgcccgc acaggtcatc tgatcacgtc 480
gcccgcccta ntctgctttt gtgaatctcc actttgttca accccacccg ccgttctctc 540
ctccttgcgc cttcctctna ccttaanaac cagcttcctc tacccnatng tanttnctct 600
gcncnngtng aaattaattc ggtccnccgg aacctcttnc ctgtggcaac tgctnaaaga 660
aactgctgtt ctgnttactg cngtccc 687

<210> 39
<211> 695
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(695)
<223> n = A,T,C or G

<400> 39
actagtctgg cctacaatag tgtgattcat gtaggacttc tttcatcaat tcaaaacccc 60
tagaaaaacg tatacagatt atataagtag ggataagatt tctaacattt ctgggctctc 120
tgacccctgc gctagactgt ggaaagggag tattattata gtatacaaca ctgctgttgc 180
cttattagtt ataacatgat aggtgctgaa ttgtgattca caatttaaaa acactgtaat 240
ccaaactttt ttttttaact gtagatcatg catgtgaatg ttaatgttaa tttgttcaan 300
gttgttatgg gtagaaaaaa ccacatgcct taaaatttta aaaagcaggg cccaaactta 360
ttagtttaaa attaggggta tgtttccagt ttgttattaa ntggttatag ctctgtttag 420
aanaaatcna ngaacangat ttngaaantt aagntgacat tatttnccag tgacttgtta 480
atttgaaatc anacacggca ccttccgttt tggtnctatt ggnntttgaa tccaancngg 540
ntccaaatct tnttggaaac ngtccnttta actttttttac nanatcttat ttttttattt 600
tggaatggcc ctatttaang ttaaaagggg ggggnnccac naccattcnt gaataaaact 660
naatatatat ccttggtccc ccaaaattta aggng 695

<210> 40
<211> 674
<212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(674)
<223> n = A,T,C or G

<400> 40
actagtagtc agttgggagt ggttgctata ccttgacttc atttatatga atttccactt 60
tattaaataa tagaaaagaa aatcccggtg cttgcagtag agttatagga cattctatgc 120
ttacagaaaa tatagccatg attgaaatca aatagtaaag gctgttctgg ctttttatct 180
tcttagctca tcttaaataa gtagtacact tgggatgcag tgcgtctgaa gtgctaatca 240
gttgtaacaa tagcacaaat cgaacttagg atgtgtttct tctcttctgt gtttcgattt 300
tgatcaattc tttaattttg ggaacctata atacagtttt cctattcttg gagataaaaa 360
ttaaatggat cactgatatt taagtcattc tgcttctcat ctnaatattc catattctgt 420
attagganaa antacctccc agcacagccc cctctcaaac cccacccaaa accaagcatt 480
tggaatgagt ctcctttatt tccgaantgt ggatggtata acccatatcn ctccaatttc 540
tgnttgggtt gggtattaat ttgaactgtg catgaaaagn ggnaatcttt nctttgggtc 600
aaantttncc ggttaatttg nctngncaaa tccaatttnc tttaagggtg tctttataaa 660
atttgctatt cngg 674

<210> 41
<211> 657
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(657)
<223> n = A,T,C or G

<400> 41
gaaacatgca agtaccacac actgtttgaa ttttgcacaa aaagtgactg tagggatcag 60
gtgatagccc cggaatgtac agtgtcttgg tgcaccaaga tgccttctaa aggctgacat 120
accttgggac cctaatgggg cagagagtat agccctagcc cagtggtgac atgaccactc 180
cctttgggag gctgaagtta aagggaatgg tatgtgtttt ctcatggaag cagcacatga 240
atnggtnaca ngatgttaaa ntaaggntct antttgggtg tcttgtcatt tgaaaaantg 300
acacactcct ancanctggt aaaggggtgc tggaagccat ggaagaactc taaaaacatt 360
agcatgggct gatctgatta cttcctggca tcccgctcac ttttatggga agtcttatta 420
naaggatggg anantttcc atatccttgc tgttggaact ctggaacact ctctaaattt 480
ccctctatta aaaatcactg nccttactac acttcctcct tganggaata gaaatggacc 540
tttctctgac ttagttcttg gcatggganc cagcccaaat taaaatctga cttntccggt 600
ttctccngaa ctcacctact tgaattggta aaacctcctt tggaattagn aaaaacc 657

<210> 42
<211> 389
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(389)
<223> n = A,T,C or G

<400> 42

actagtgctg aggaatgtaa acaagtttgc tgggccttgc gagacttcac caggttgttt 60
cgatagctca cactcctgca ctgtgcctgt cacccaggaa tgtcttttt aattagaaga 120
caggaagaaa acaaaaacca gactgtgtcc cacaatcaga aacctccgtt gtggcagang 180
ggccttcacc gccaccaggg tgtcccgcca gacagggaga gactccagcc ttctgaggcc 240
atcctgaaga attcctgttt gggggttgtg aaggaaaatc acccggattt aaaaagatgc 300
tgttgcctgc ccgcgtngtn gggaagggac tggtttcctg gtgaatttct taaaagaaaa 360
atattttaag ttaagaaaaa aaaaaaaaa 389

<210> 43
<211> 279
<212> DNA
<213> Homo sapien

<400> 43
actagtgaca agctcctggt cttgagatgt cttctcgtta aggagatggg ccttttggag 60
gtaaaggata aaatgaatga gttctgtcat gattcactat tctagaactt gcatgacctt 120
tactgtgtta gctctttgaa tgttcttgaa attttagact ttctttgtaa acaaataata 180
tgtccttatc attgtataaa agctgttatg tgcaacagtg tggagatcct tgtctgattt 240
aataaaatac ttaaacactg aaaaaaaaaa aaaaaaaaa 279

<210> 44
<211> 449
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(449)
<223> n = A,T,C or G

<400> 44
actagtagca tcttttctac aacgttaaaa ttgcagaagt agcttatcat taaaaaacaa 60
caacaacaac aataacaata aatcctaagt gtaaatcagt tattctaccc cctaccaagg 120
atatcagcct gtttttttccc ttttttctcc tgggaataat tgtgggcttc ttcccaaatt 180
tctacagcct ctttcctctt ctcatgcttg agcttccctg tttgcacgca tgcgttgtgc 240
aagantgggc tgtttngctt ggantncggt ccnagtggaa ncatgctttc ccttgttact 300
gttggaagaa actcaaacct tcnancccta ggtgttncca ttttgtcaag tcatcactgt 360
atttttgtac tggcattaac aaaaaaagaa atnaaatatt gttccattaa actttaataa 420
aactttaaaa gggaaaaaaa aaaaaaaaa 449

<210> 45
<211> 559
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(559)
<223> n = A,T,C or G

<400> 45
actagtgtgg gggaatcacg gacacttaaa gtcaatctgc gaaataattc ttttattaca 60
cactcactga agtttttgag tcccagagag ccattctatg tcaaacattc caagtacttt 120
ttgagagccc agcattacat caacatgccc gtgcagttca aaccgaagtc cgcaggcaaa 180
tttgaagctt tgcttgtcat tcaaacagat gaaggcaaga gtattgctat tcgactaatt 240

ggtgaagctc ttggaaaaaa ttnactagaa tacttttttgt gttaagttaa ttacataagt 300
tgtatttttgt taactttatc tttctacact acaattatgc ttttgtatat atattttgta 360
tgatggatat ctataattgt agattttgtt tttacaagct aatactgaag actcgactga 420
aatattatgt atctagccca tagtattgta cttaactttt acagggtgaa aaaaaaattc 480
tgtgtttgca ttgattatga tattctgaat aaatatggga atatatttta atgtgggtaa 540
aaaaaaaaaa aaaaaggaa 559

<210> 46
<211> 731
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(731)
<223> n = A,T,C or G

<400> 46
actagttcta gtaccatggc tgtcatagat gcaaccatta tattccattt agtttcttcc 60
tcaggttccc taacaattgt ttgaaactga atatatatgt ttatgtatgt gtgtgtgttc 120
actgtcatgt atatggtgta tatgggatgt gtgcagtttt cagttatata tatattcata 180
tatacatatg catatatatg tataatatac atatatacat gcatacactt gtataatata 240
catatatata cacatatatg cacacatatn atcactgagt tccaaagtga gtctttattt 300
ggggcaattg tattctctcc ctctgtctgc tcactgggcc tttgcaagac atagcaattg 360
cttgatttcc tttggataag agtcttatct tcggcactct tgactctagc cttaacttta 420
gatttctatt ccagaatacc tctcatatct atcttaaaac ctaaganggg taaagangtc 480
ataagattgt agtatgaaag antttgctta gttaaattat atctcaggaa actcattcat 540
ctacaaatta aattgtaaaa tgatggtttg ttgtatctga aaaaatgttt agaacaagaa 600
atgtaactgg gtacctgtta tatcaaagaa cctcnattta ttaagtctcc tcatagccan 660
atccttatat ngcccctctct gacctgantt aatananact tgaataatga atagttaatt 720
taggnttggg c 731

<210> 47
<211> 640
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(640)
<223> n = A,T,C or G

<400> 47
tgcgngccgg tttggccctt ctttgtanga cactttcatc cgccctgaaa tcttcccgat 60
cgttaataac tcctcaggtc cctgcctgca cagggttttt tcttantttg ttgcctaaca 120
gtacaccaaa tgtgacatcc tttcaccaat atngattnct tcataccaca tcntcnatgg 180
anacgactnc aacaattttt tgatnacccn aaanactggg ggctnnaana agtacantct 240
ggagcagcat ggacctgtcn gcnactaang gaacaanagt nntgaacatt tacacaacct 300
ttggtatgtc ttactgaaag anagaaacat gcttctnncc ctagaccacg aggncaaccg 360
caganattgc caatgccaag tccgagcggt tagatcaggt aatacattcc atggatgcat 420
tacatacntt gtccccgaaa nanaagatgc cctaanggct tcttcanact ggtccngaaa 480
acanctacac ctggtgcttg ganaacanac tctttggaag atcatctggc acaagttccc 540
cccagtgggt tttnccttgg cacctanctt accanatcna ttcggaancc attctttgcc 600
ntggcnttnt nttgggacca ntcttctcac aactgnaccc 640

<210> 48
<211> 257
<212> DNA
<213> Homo sapien

<400> 48
actagtatat gaaaatgtaa atatcacttg tgtactcaaa caaaagttgg tcttaagctt 60
ccaccttgag cagccttgga aacctaacct gcctctttta gcataatcac attttctaaa 120
tgattttctt tgttcctgaa aaagtgattt gtattagttt tacatttgtt ttttggaaga 180
ttatatttgt atatgtatca tcataaaata tttaaataaa aagtatcttt agagtgaaaa 240
aaaaaaaaaa aaaaaaa 257

<210> 49
<211> 652
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(652)
<223> n = A,T,C or G

<400> 49
actagttcag atgagtggct gctgaagggg cccccttgtc attttcatta taacccaatt 60
tccacttatt tgaactctta agtcataaat gtataatgac ttatgaatta gcacagttaa 120
gttgacacta gaaactgccc atttctgtat tacactatca aataggaaac attggaaaga 180
tggggaaaaa aatcttattt taaaatggct tagaaagttt tcagattact ttgaaaattc 240
taaacttctt tctgtttcca aaacttgaaa atatgtagat ggactcatgc attaagactg 300
ttttcaaagc tttcctcaca tttttaaagt gtgatttttcc ttttaatata catatttatt 360
ttctttaaag cagctatatc ccaacccatg actttggaga tatacctatn aaaccaatat 420
aacagcangg ttattgaagc agctttctca aatgttgctt cagatgtgca agttgcaaat 480
tttattgtat ttgtanaata caatttttgt tttaaactgt atttcaatct atttctccaa 540
gatgcttttc atatagagtg aaatatccca ngataactgc ttctgtgtcg tcgcatttga 600
cgcataactg cacaaatgaa cagtgtatac ctcttggttg tgcattnacc cc 652

<210> 50
<211> 650
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(650)
<223> n = A,T,C or G

<400> 50
ttgcgctttg atttttttag ggcttgtgcc ctgtttcact tatagggtct agaatgcttg 60
tgttgagtaa aaaggagatg cccaatattc aaagctgcta aatgttctct ttgccataaa 120
gactccgtgt aactgtgtga acacttggga ttttttctcct ctgtcccgag gtcgtcgtct 180
gctttctttt ttgggttctt tctagaagat tgagaaatgc atatgacagg ctgagancac 240
ctccccaaac acacaagctc tcagccacan gcagctttctc cacagcccca gcttcgcaca 300
ggctcctgga nggctgcctg ggggaggcag acatgggagt gccaaggtgg ccagatggtt 360
ccaggactac aatgtcttta ttttttaactg tttgccactg ctgcccctcac ccctgcccgg 420
ctctggagta ccgtctgccc canacaagtg ggantgaaat gggggtgggg gggaacactg 480
attcccantt agggggtgcc taactgaaca gtagggatan aaggtgtgaa cctgngaant 540

gcttttataa attatnttcc ttgttanatt tatttttaa tttaatctct gttnaactgc 600
ccngggaaaa ggggaaaaaa aaaaaaaaat tctntttaaa cacatgaaca 650

<210> 51
<211> 545
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(545)
<223> n = A,T,C or G

<400> 51
tggcgtgcaa ccagggtagc tgaagtttgg gtctgggact ggagattggc cattaggcct 60
cctganattc cagctccctt ccaccaagcc cagtcttgct acgtggcaca gggcaaacct 120
gactcccttt gggcctcagt ttcccctccc cttcatgana tgaaaagaat actacttttt 180
cttgttggtc taacnttgct ggacncaaag tgtngtcatt attgttgtat tgggtgatgt 240
gtncaaaact gcagaagcte actgcctatg agaggaanta agagagatag tggatganag 300
ggacanaagg agtcattatt tggtatagat ccacccntcc caacctttct ctcctcagtc 360
cctgcnccte atgtnteteg tntggtgagt cctttgtgcc accanccatc atgctttgca 420
ttgctgccat cctgggaagg gggtgnatcg tctcacaact tgttgtcatc gtttganatg 480
catgctttct tnatnaaaca aanaaannaa tgtttgacag ngtttaaaat aaaaaanaaa 540
caaaa 545

<210> 52
<211> 678
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(678)
<223> n = A,T,C or G

<400> 52
actagtagaa gaactttgcc gcttttgtgc ctctcacagg cgcctaaagt cattgccatg 60
ggaggaagac gatttggggg gggaggggag gggggcangg tccgtggggc tttccctant 120
ntatctccat ntccantgnn cnntgtcgcc tcttccctcg tcncattnga anttantccc 180
tggncccenn ncccteteen ncctncncct ccccccteeg ncncctccnn ctttttntan 240
ncttccccat ctccntcccc cctnanngtc ccaacnccgn cagcaatnnc ncacttnctc 300
nctccncncc tccnnccgtt cttctnttct cnacntntnc ncnnntncen tgccnntnaa 360
annctctccc cnctgcaanc gattctctcc ctccncnnan ctntccactc cntnctttcte 420
ncncgctcct nttcntcnnc ccacctctcn ccttcgnccc cantacnctc nccncccttn 480
cgnntcnttn nnntcctcnn accncccncc tcccttcncc cctcttctcc ccggtntntc 540
tctctcccnc nncncnncct cnncccntcc nngcgncent ttccgccccn cnccncentt 600
ccttcntcnc cantccatcn cntntnccat nctncctncc nctcacnccc gctncccccn 660
ntctctttca cacngtcc 678

<210> 53
<211> 502
<212> DNA
<213> Homo sapien

<220>

<221> misc_feature
<222> (1)...(502)
<223> n = A,T,C or G

<400> 53
tgaagatcct ggtgtcgcca tgggccgccg ccccgcccgt tgttaccggt attgtaagaa 60
caagccgtac ccaaagtctc gcttctgccg aggtgtccct gatgccaaaa ttcgcatttt 120
tgacctgggg cggaaaaang caaaantgga tgagtctccg ctttgtggcc acatggtgtc 180
agatcaatat gagcagctgt cctctgaagc cctgnangct gcccgaattt gtgccaataa 240
gtacatggta aaaagtngtg gcnaagatgc ttccatatcc gggtgcggnt ccaccccttc 300
cacgtcatcc gcatcaacaa gatgttgtcc tgtgctgggg ctgacaggct cccaacaggc 360
atgcgaagtg cctttggaaa acccanggca ctgtggccag ggttcacatt gggccaattn 420
atcatgttca tccgcaccaa ctgcagaaca angaacntgt naattnaagc cctgcccagg 480
gncaanttca aatttcccgg cc 502

<210> 54
<211> 494
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(494)
<223> n = A,T,C or G

<400> 54
actagtccaa gaaaaatatg cttaatgtat attacaaagg ctttgtatat gttaacctgt 60
tttaatgcca aaagtttgct ttgtccacaa tttccttaag acctcttcag aaagggattt 120
gtttgcctta atgaatactg ttgggaaaaa acacagtata atgagtgaaa agggcagaag 180
caagaaattt ctacatctta gcgactccaa gaagaatgag tatccacatt tagatggcac 240
attatgagga ctttaatctt tccttaaaca caataatgtt ttctttttc ttttattcac 300
atgatttcta agtatatttt tcatgcagga cagtttttca accttgatgt acagtgactg 360
tgttaaattt ttctttcagt ggcaacctct ataatcttta aaatatggtg agcatcttgt 420
ctgttttgaa ngggatatga cnatnaatct atcagatggg aaatcctgtt tccaagttag 480
aaaaaaaaaa aaaa 494

<210> 55
<211> 606
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(606)
<223> n = A,T,C or G

<400> 55
actagtaaaa agcagcattg ccaaataatc cctaatttta cactaaaaat ataatgaaat 60
gatgttaagc tttttgaaaa gtttaggtta aacctactgt tgttagatta atgtatttgt 120
tgcttccctt tatctggaat gtggcattag cttttttatt ttaaccctct ttaatttctta 180
ttcaattcca tgacttaagg ttggagagct aaacactggg atttttggat aacagactga 240
cagttttgca taattataat cggcattgta catagaaagg atatggctac cttttgttaa 300
atctgcactt tctaaatatc aaaaaaggga aatgaagtat aaatcaattt ttgtataatc 360
tgtttgaaac atgantttta tttgcttaat attanggctt tgccctttta tgttagtctc 420
ttgggatcct gtgtaaaact gttctcatta aacaccaaac agttaagtcc attctctggt 480

actagctaca aattccgttt catattctac ntaacaattt aaattaactg aaatatttct 540
anatggtcta cttctgtcnt ataaaaacna aacttgantt nccaaaaaaa aaaaaaaaaa 600
aaaaaa 606

<210> 56
<211> 183
<212> DNA
<213> Homo sapien

<400> 56
actagtatat ttaaacttac aggcttattt gtaatgtaaa ccaccatttt aatgtactgt 60
aattaacatg gttataatac gtacaatcct tcccctcatcc catcacacaa ctttttttgt 120
gtgtgataaa ctgattttgg tttgcaataa aaccttgaaa aataaaaaaa aaaaaaaaaa 180
aaa 183

<210> 57
<211> 622
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(622)
<223> n = A,T,C or G

<400> 57
actagtcact actgtcttct ccttgtagct aatcaatcaa tattcttccc ttgcctgtgg 60
gcagtggaga gtgctgctgg gtgtacgctg cacctgccca ctgagttggg gaaagaggat 120
aatcagtgag cactgttctg ctcagagctc ctgatctacc ccacccccta ggatccagga 180
ctgggtcaaa gctgcatgaa accaggccct ggcagcaacc tgggaatggc tggaggtggg 240
agagaacctg acttctcttt ccctctccct cctccaacat tactggaact ctatcctgtt 300
agggatcttc tgagcttgtt tccctgctgg gtgggacaga agacaaagga gaagggangg 360
tctacaanaa gcagcccttc tttgtcctct ggggttaatg agcttgacct ananttcatg 420
gaganaccan aagcctctga tttttaattt ccntnaaatg tttgaagtnt atatntacat 480
atatatattt ctttnaatnt ttgagtcttt gatatgtctt aaaatccant ccctctgccn 540
gaaaccctgaa ttaaaaccat gaanaaaaat gtttncctta aagatgttan taattaattg 600
aaacttgaaa aaaaaaaaaa aa 622

<210> 58
<211> 433
<212> DNA
<213> Homo sapien

<400> 58
gaacaaattc tgattggtta tgtaccgtca aaagacttga agaaatttca tgattttgca 60
gtgtggaagc gttgaaaatt gaaagttact gcttttccac ttgctcatat agtaaaggga 120
tcctttcagc tgccagtgtt gaataatgta tcatccagag tgatgttatc tgtgacagtc 180
accagcttta agctgaacca ttttatgaat accaaataaa tagacctctt gtactgaaaa 240
catatttgtg actttaatcg tgctgcttgg atagaaatat ttttactggt tcttctgaat 300
tgacagtaaa cctgtccatt atgaatggcc tactgttcta ttatttgttt tgacttgaat 360
ttatccacca aagacttcat ttgtgtatca tcaataaagt tgtatgtttc aactgaaaaa 420
aaaaaaaaaa aaa 433

<210> 59
<211> 649

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(649)
<223> n = A,T,C or G

<400> 59
actagttatt atctgacttt cnggttataa tcattctaat gagtgtgaag tagcctctgg 60
tgtcatttgg atttgcattt ctctgatgag tgatgctatc aagcaccttt gctggtgctg 120
ttggccatat gtgtatgttc cctggagaag tgtctgtgct gagccttggc ccactttta 180
attaggcgtn tgtcttttta ttactgagtt gtaaganttc tttatatatt ctggattcta 240
gacccttatc agatacatgg tttgcaaata ttttctccca ttctgtgggt tgtgttttca 300
ctttatcgat aatgtcctta gacatataat aaatttgtat tttaaaagtg acttgatttg 360
ggctgtgcaa ggtgggctca cgcttgtaat cccagcactt tgggagactg aggtgggtgg 420
atcatatgan gangctagga gttcgaggtc agcctggcca gcatagcgaa aacttgtctc 480
tacnaaaaat acaaaaatta gtcaggcatg gtggtgcacg tctgtaatac cagcttctca 540
ggangctgan gcacaaggat cacttgaacc ccagaangaa gangttgcag tganctgaag 600
atcatgccag ggcaacaaaa atgagaactt gtttaaaaaa aaaaaaaaa 649

<210> 60
<211> 423
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(423)
<223> n = A,T,C or G

<400> 60
actagttcag gccttccagt tcactgacaa acatggggaa gtgtgcccag ctggctggaa 60
acctggcagt gataccatca agcctgatgt ccaaaagagc aaagaatatt tctccaagca 120
gaagtgagcg ctgggctgtt ttagtgccag gctgcggtgg gcagccatga gaacaaaacc 180
tcttctgtat ttttttttte cattagtana acacaagact cngattcagc cgaattgtgg 240
tgtcttacaa ggcagggctt tcctacaggg ggtgganaaa acagcctttc ttcctttggt 300
aggaatggcc tgagttggcg ttgtgggcag gctactggtt tgtatgatgt attagtagag 360
caacccatta atcttttgta gtttgtatna aacttganct gagaccttaa acaaaaaaaa 420
aaa 423

<210> 61
<211> 423
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(423)
<223> n = A,T,C or G

<400> 61
cgggactgga atgtaaagtg aagttcggag ctctgagcac gggctcttcc cgccgggtcc 60
tccctcccca gacccagag ggagaggccc accccgccca gccccgcccc agcccctgct 120
caggtctgag tatggctggg agtcgggggc cacaggcctc tagctgtgct gctcaagaag 180

actggatcag ggtanctaca agtggccggg ccttgccttt gggattctac cctgttccta 240
atttggtgtt ggggtgcggg gtccctggcc ccctttttcca cactncctcc ctccngacag 300
caacctccct tggggcaatt gggcctggnt ctccnccccgn tgttgcnacc ctttgttggt 360
ttaaggnctt taaaaatgtt annttttccc ntgccngggt taaaaaagga aaaaactnaa 420
aaa 423

<210> 62
<211> 683
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(683)
<223> n = A,T,C or G

<400> 62
gctggagagg ggtacggact ttcttggagt tgtcccaggt tggaatgaga ctgaacttcaa 60
gaagagaccc taagagactg gggaatggtt cctgccttca ggaaagtgaa agacgcttag 120
gctgtcaaca cttaaaggaa gtccccttga agcccagagt ggacagacta gacccattga 180
tggggccact ggccatggtc cgtggacaag acattccngt gggccatggc acaccggggg 240
ggatcaaaat gtgtacttgt ggggtctcgc cccttgccaa aaccaaacca ntcccactcc 300
tgtcnttgga ctttcttccc attccctcct ccccaaatgc acttcccctc ctcccctctgc 360
ccctcctgtg tttttggaat tctgtttccc tcaaaattgt taatttttta nttttngacc 420
atgaacttat gtttggggtc nangttcccc ttnccaatgc atactaatat attaatggtt 480
atttattttt gaaatatttt ttaatgaact tggaaaaaat tnntggaatt tccttnctttc 540
cnttttnttt ggggggggtg gggggntggg ttaaaatttt tttggaancc cnatnggaaa 600
ttnttacttg gggccccccc naaaaaantn anttccaatt cttnnatngc ccctnttccn 660
ctaaaaaaaa ananannaaa aan 683

<210> 63
<211> 731
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(731)
<223> n = A,T,C or G

<400> 63
actagtcata aagggtgtgc gcgtcttcga cgtggcggtc ttggcgccac tgctgcgaga 60
cccggccctg gacctcaagg tcatccactt ggtgcgtgat ccccgcgcgg tggcgagttc 120
acggatccgc tcgcgccacg gcctcatccg tgagagccta caggtggtgc gcagccgaga 180
ccgcgagctc accgcatgcc cttcttggag gccgcgggcc acaagcttgg cgcccanaaa 240
gaaggcgtng ggggcccgca aantaccacg ctctgggcgc tatggaangt cctcttgcaa 300
taatattggt tnaaaanctg canaanagcc cctgcanccc cctgaactgg gntgcagggc 360
cncttacctn gtttggntgc ggttacaaag aacctgtttn ggaaaaccct nccnaaaacc 420
ttccgggaaa attntncaaa ttttttnttgg ggaattnttg ggtaaacccc ccnaaaatgg 480
gaaacntttt tgcccctnnaa antaaaccat tnggttccgg gggccccccc ncaaaaccct 540
ttttttnttt tttntgcccc cantnnnccc ccggggcccc ttttttttngg ggaaaanccc 600
ccccccctncc nanantttta aaagggnggg anaatttttn nttnccccnc gggnccccnn 660
ggngntaaaa nggtttcncc cccccgaggg gnggggnnnc ctcnnaaacc cntntcnnna 720
ccncnttttn n 731

<210> 64
<211> 313
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

<400> 64
actagttgtg caaaccacga ctgaagaaag acgaaaagtg ggaaataact tgcaacgtct 60
gttagagatg gttgctacac atgttgggtc tgtagagaaa catcttgagg agcagattgc 120
taaagttgat agagaatatg aagaatgcat gtcagaagat ctctcggaaa atattaaaga 180
gattagagat aagtatgaga agaaagctac tctaattaag tctttctgaag aatgaagatn 240
aaatgttgat catgtatata tatccatagt gaataaaatt gtctcagtaa agttgtaaaa 300
aaaaaaaaaa aaa 313

<210> 65
<211> 420
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(420)
<223> n = A,T,C or G

<400> 65
actagttccc tggcaggcaa gggcttccaa ctgaggcagt gcatgtgtgg cagagagagg 60
caggaagctg gcagtggcag cttctgtgtc tagggagggg tgtggctccc tccttccctg 120
tctgggaggt tggagggaag aatctaggcc ttagcttgcc ctcctgccac ccttcccctt 180
gtagatactg ccttaacact ccctcctctc tcagctgtgg ctgccaccca agccaggttt 240
ctccgtgctc actaatttat ttccaggaaa ggtgtgtgga agacatgagc cgtgtataat 300
atttgtttta acattttcat tgcaagtatt gaccatcatc cttggttgtg tatcgttgta 360
acacaaatta atgatattaa aaagcatcca aacaaagccn annnnnaana nnannngaaa 420

<210> 66
<211> 676
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(676)
<223> n = A,T,C or G

<400> 66
actagtttcc tatgatcatt aaactcattc tcagggttaa gaaaggaatg taaatttctg 60
cctcaatttg tacttcatca ataagttttt gaagagtgca gatttttagt caggtcttaa 120
aaataaactc acaaatctgg atgcatttct aaattctgca aatgtttcct ggggtgactt 180
aacaaggaat aatcccacaa tatacctagc tacctaatac atggagctgg ggctcaaccc 240
actgttttta aggatttgcg cttacttgtg gctgaggaaa aataagtagt tccgagggaa 300
gtagttttta aatgtgagct tatagatngg aaacagaata tcaacttaat tatggaaatt 360
gttagaaacc tgttctcttg ttatctgaat cttgattgca attactattg tactggatag 420

actccagccc attgcaaagt ctcagatatc ttanctgtgt agttgaattc cttggaaatt 480
ctttttaaga aaaaattgga gtttnaaaga aataaacccc tttgttaaat gaagcttggc 540
tttttggtga aaaanaatca tcccgcaggg cttattgttt aaaaanggaa ttttaagcct 600
ccctggaaaa anttgttaat taaatgggga aaatgntggg naaaaattat ccgttagggt 660
ttaaagggaa aactta 676

<210> 67
<211> 620
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(620)
<223> n = A,T,C or G

<400> 67
caccattaaa gctgcttacc aagaacttcc ccagcatttt gacttccttg tttgatagct 60
gaattgtgag caggtgatag aagagccttt ctagttgaac atacagataa tttgctgaat 120
acattccatt taatgaaggg gttacatctg ttacgaagct actaagaagg agcaagagca 180
taggggaaaa aaatctgatc agaacgcatc aaactcacat gtgccccctc tactacaaac 240
agattgtagt gctgtggtgg tttattccgt tgtgcagaac ttgcaagctg agtcactaaa 300
cccaaagaga ggaaattata ggttagttaa acattgtaat cccaggaact aagtttaatt 360
cacttttgaa gtgttttgtt ttttatttt ggtttgtctg atttactttg ggggaaaang 420
ctaaaaaaaa agggatatca atctctaatt cagtgcccac taaaagttgt ccctaaaaag 480
tctttactgg aanttatggg acttttaag ctccaggtnt tttggtcctc caaattaacc 540
ttgcatgggc cccttaaaat tgttgaangg cattcctgcc tctaagtttg gggaaaattc 600
ccccnttttn aaaatttgga 620

<210> 68
<211> 551
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(551)
<223> n = A,T,C or G

<400> 68
actagtagct ggtacataat cactgaggag ctatttctta acatgctttt atagaccatg 60
ctaatgctag accagtattt aagggctaat ctcacacctc cttagctgta agagtctggc 120
ttagaacaga cctctctgtg caataacttg tggccactgg aaatccctgg gccggcattt 180
gtattggggt tgcaatgact cccaagggcc aaaagagtta aaggcacgac tgggatttct 240
tctgagactg tggtgaaact ccttccaagg ctgagggggt cagtangtgc tctgggaggg 300
actcggcacc actttgatat tcaacaagcc acttgaagcc caattataaa attgttattt 360
tacagctgat ggaactcaat ttgaaccttc aaaactttgt tagtttatcc tattatattg 420
ttaaacctaa ttacatttgt ctagcattgg atttggttcc tgtngcatat gttttttccn 480
cctatgtgct ccccticccc nnatcttaat ttaaaccnca attttgcnat tcnccnnnnn 540
nannnannna a 551

<210> 69
<211> 396
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(396)
<223> n = A,T,C or G

<400> 69
cagaaatgga aagcagagtt ttcatttctg tttataaacg tctccaaaca aaaatggaaa 60
gcagagtttt cattaaatcc ttttaccttt tttttttctt ggtaatcccc tcaaataaca 120
gtatgtggga tattgaatgt taaagggata tttttttcta ttatttttat aattgtacaa 180
aattaagcaa atgttaaaag ttttatatgc tttattaatg ttttcaaaag gtatnataca 240
tgtgatacat tttttaagct tcagttgctt gtcttctggt actttctgtt atgggctttt 300
ggggagccan aaaccaatct acnatctctt tttgtttgcc aggacatgca ataaaattta 360
aaaaataaat aaaaactatt nagaaattga aaaaaa 396

<210> 70
<211> 536
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(536)
<223> n = A,T,C or G

<400> 70
actagtgcaa aagcaaatat aaacatcgaa aaggcgttcc tcacgttagc tgaagatatc 60
cttcgaaaga cccctgtaaa agagcccaac agtgaaaatg tagatatcag cagtggagga 120
ggcgtgacag gctggaagag caaatgctgc tgagcattct cctgttccat cagttgccat 180
ccactacccc gttttctctt cttgctgcaa aataaaccac tctgtccatt tttaactcta 240
aacagatatt tttgtttctc atcttaacta tccaagccac ctatttttatt tgttctttca 300
tctgtgactg cttgctgact ttatcataat tttcttcaaa caaaaaaatg tatagaaaaa 360
tcatgtctgt gacttcattt ttaaatgnta cttgctcagc tcaactgcat ttcagttgtt 420
ttatagtcca gttcttatca acattnaaac ctatngcaat catttcaaat ctattctgca 480
aattgtataa gaataaaagt tagaatttaa caattaaaaa aaaaaaaaaa aaaaaa 536

<210> 71
<211> 865
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(865)
<223> n = A,T,C or G

<400> 71
gacaaagcgt taggagaaga anagaggcag ggaanactnc ccaggcacga tggccncctt 60
cccaccagca accagcgccc cccaccagcc cccaggcccg gacgacgaag actccatcct 120
ggattaatct nacctctntc gcctgnccca ttcctacctc ggaggtggag gccggaaagg 180
tcncaccaag aganaanctg ctgccaacac caaccgcccc agccctggcg ggcacganag 240
gaaactggtg accaatctgc agaattctna gaggaanaag cnaggggccc cgcgctnaga 300
cagagctgga tatgangcca gaccatggac nctacncccn ncaatncana cgggactgcg 360
gaagatggan gacccncgac nngatcaggc cngctnncca nccccccacc cctatgaatt 420
attcccgctg aangaatctc tgannggctt ccannaaagc gcctcccccnc cnaacgnaan 480

tncaacatng ggattanang ctgggaactg naaggggcaa ancctnnaat atccccagaa 540
acaanctctc ccnaanaaac tggggcncct catnggtggn accaactatt aactaaaccg 600
cacgccaagn aantataaaa gggggggccc tccncggnng acccccctttt gtcccttaat 660
ganggttatc cnccttgcgt accatggtnc ccnnttctgt ntgnatgttt ccnctcccct 720
ccncctatnt cnagccgaac tcnnatttnc ccgggggtgc natcnantng tncnccctttn 780
ttngttgncc cngccctttc cgncggaacn cgtttccccg ttantaacgg cacccggggn 840
aagggtgntt ggccccctcc ctccc 865

<210> 72
<211> 560
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(560)
<223> n = A,T,C or G

<400> 72
cctggacttg tcttggttcc agaacctgac gacccggcga cggcgacgtc tcttttgact 60
aaaagacagt gtccagtgct ccngcctagg agtctacggg gaccgcctcc cgcgccgcca 120
ccatgcccaa cttctctggc aactggaaaa tcatccgatc ggaaaacttc gangaattgc 180
tcnaantgct gggggtgaat gtgatgctna ngaanattgc tgtggctgca gcgtccaagc 240
cagcagtgga gatcnaacag gagggagaca ctttctacat caaaacctcc accaccgtgc 300
gcaccacaaa gattaacttc nnngttgggg aggantttga ggancaaact gtggatngga 360
ngcctgtnaa aacctggtga aatgggagaa tganaataaa atggtctgtg ancanaaact 420
cctgaaagga gaaggccccc anaactcctg gaccngaaaa actgacccnc cnatngggga 480
actgatnctt gaaccctgaa cgggcgggat gancctttt tnttgccncc naangggttc 540
tttccntttc cccaaaaaaa 560

<210> 73
<211> 379
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(379)
<223> n = A,T,C or G

<400> 73
ctggggancc ggcggtnngc nccatntcnn gncgcgaagg tggcaataaa aanccnctga 60
aaccgcncaa naaacatgcc naagatatgg acgaggaaga tngngctttc nngnacaanc 120
gnanngagga acanaacaaa ctcnangagc tctcaagcta atgccgcggg gaaggggccc 180
ttggccacnn gtggaattaa gaaatctggc aaannngtann tgttccttgt gcctnangag 240
ataagngacc ctttatttca tctgtattta aacctctctn ttcccctgnca taacttcttt 300
tnccacgtan agntggaant anttgttgtc ttggactgtt gtncatttta gannaaactt 360
ttgttcaaaa aaaaaataa 379

<210> 74
<211> 437
<212> DNA
<213> Homo sapien

<220>

<221> misc_feature
<222> (1)...(437)
<223> n = A,T,C or G

<400> 74
actagttcag actgccacgc caaccccaga aaataccca catgccagaa aagtgaagtc 60
ctaggtgttt ccatctatgt ttcaatctgt ccatctacca ggcctcgcga taaaaacaaa 120
acaaaaaaac gctgccaggt tttanaagca gttctggtct caaaaccatc aggatcctgc 180
caccagggtt cttttgaaat agtaccacat gtaaaaggga atttggcttt cacttcatct 240
aatcactgaa ttgtcaggct ttgattgata attgtagaaa taagtagcct tctgttgtgg 300
gaataagtta taatcagtat tcatctcttt gtttttgtc actcttttct ctctnattgt 360
gtcatttgta ctgtttgaaa aatatttctt ctataaaatt aaactaacct gccttaaaaa 420
aaaaaaaaaa aaaaaaa 437

<210> 75
<211> 579
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(579)
<223> n = A,T,C or G

<400> 75
ctccgtcgcc gccaagatga tgtgcggggc gccctccgcc acgcagccgg ccaccgccga 60
gacccagcac atcgccgacc aggtgaggtc ccagcttgaa gagaaagaaa acaagaagtt 120
ccctgtgttt aaggccgtgt cattcaagag ccaggtggtc gcggggacaa actacttcat 180
caaggtgcac gtcggcgacg aggacttcgt acacctgcga gtgttccaat ctctccctca 240
tgaaaacaag cccttgacct tatctaacta ccagaccaac aaagccaagc atgatgagct 300
gacctatttc tgatcctgac tttggacaag gcccttcagc cagaagactg acaaagtcat 360
cctccgtcta ccagagcgtg cacttgtgat cctaaaataa gcttcatctc cgggctgtgc 420
ccttggggtg gaaggggcan gatctgcact gcttttgcat ttctcttcct aaatttcatt 480
gtgttgattc tttccttcca ataggtgatc ttnattactt tcagaatatt ttccaaatna 540
gatatatttt naaaatcctt aaaaaaaaaa aaaaaaaaa 579

<210> 76
<211> 666
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(666)
<223> n = A,T,C or G

<400> 76
gtttatccta tctctccaac cagattgtca gctccttgag ggcaagagcc acagtatatt 60
tccctgtttc ttccacagtg cctaataata ctgtggaact aggttttaat aatttttaa 120
ttgatgttgt tatgggcagg atggcaacca gaccattgtc tcagagcagg tgctggctct 180
ttcctggcta ctccatgttg gctagcctct ggtaacctct tacttattat cttcaggaca 240
ctcactacag ggaccaggga tgatgcaaca tccttgtctt tttatgacag gatgtttgct 300
cagctttctcc aacaataaaa agcacgtggt aaaacacttg cggatattct ggactgtttt 360
taaaaaatat acagtttacc gaaaatcata ttatcttaca atgaaaagga ntttatagat 420
cagccagtga acaacctttt cccaccatac aaaaattcct tttcccgaan gaaaanggct 480

ttctcaataa ncctcacttt cttaanatct tacaagatag ccccganatc ttatcgaaac 540
tcattttagg caaatatgan ttttattgtn cgttacttgt ttcaaaattt ggtattgtga 600
atatcaatta ccacccccat ctcccatgaa anaaanggga aanggtgaan ttcntaancg 660
cttaaa 666

<210> 77
<211> 396
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(396)
<223> n = A,T,C or G

<400> 77
ctgcagcccg ggggatccac taatctacca nggttatttg gcagctaatt ctanatttgg 60
atcattgccc aaagttgcac ttgctggtct cttgggattt ggccttggaa aggtatcata 120
catanganta tgccanaata aattccattt ttttgaaaat canctccntg gggctggttt 180
tggtccacag cataacangc actgcctcct tacctgtgag gaatgcaaaa taaagcatgg 240
attaagtgag aagggagact ctcagccttc agcttcctaa attctgtgtc tgtgactttc 300
gaagtttttt aaacctctga atttgtacac atttaaaatt tcaagtgtac tttaaaataa 360
aatacttcta atgggaacaa aaaaaaaaaa aaaaaa 396

<210> 78
<211> 793
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(793)
<223> n = A,T,C or G

<400> 78
gcatcctagc cgccgactca cacaaggcag gtgggtgagg aaatccagag ttgccatgga 60
gaaaattcca gtgtcagcat tcttgctcct tgtggccctc tcctacactc tggccagaga 120
taccacagtc aaacctggag ccaaaaagga cacaaaggac tctcgaccca aactgcccca 180
gacctctcc agaggttggg gtgaccaact catctggact cagacatatg aagaagctct 240
atataaatcc aagacaagca acaaaccctt gatgattatt catcacttgg atgagtgccc 300
acacagtcna gctttaaaga aagtgtttgc tgaaaataaa gaaatccaga aattggcaga 360
gcagtttgtc ctcctcaatc tggtttatga aacaactgac aaacaccttt ctcctgatgg 420
ccagtatgtc ccaggattat gtttgttgac ccatctctga cagttgaagc cgatatcctg 480
ggaagatatt cnaaccgtct ctatgcttac aaactgcaga tacgctctgt tgcttgacac 540
atgaaaaagc tctcaagttg ctnaaaatga attgtaagaa aaaaaatctc cagccttctg 600
tctgtcggct tgaaaattga aaccagaaaa atgtgaaaaa tggctattgt ggaacanatn 660
gacacctgat taggttttgg ttatgttcac cactattttt aanaaaanan nttttaaaat 720
ttggttcaat tntctttttn aaacaatntg tttctacntt gnganctgat ttctaaaaaa 780
aataatnttt ggc 793

<210> 79
<211> 456
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(456)
<223> n = A,T,C or G

<400> 79
actagtatgg ggtgggaggc cccacccttc tcccctaggc gctgttcttg ctccaaaggg 60
ctccgtggag agggactggc agagctgang ccacctgggg ctggggatcc cactcttctt 120
gcagctgttg agcgcaccta accactggtc atgcccccac ccctgctctc cgcacccgct 180
tcctcccgac cccangacca ggctacttct cccctcctct tgcctccctc ctgcccctgc 240
tgcctctgat cgtangaatt gangantgtc ccgccttgtg gctganaatg gacagtggca 300
ggggctggaa atgggtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gcnccccccc 360
tgcaagaccg agattgaggg aaancatgtc tgctgggtgt gaccatgttt cctctccata 420
aantnccccc gtgacnctca naaaaaaaaa aaaaaa 456

<210> 80
<211> 284
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(284)
<223> n = A,T,C or G

<400> 80
ctttgtacct ctagaaaaga taggtattgt gtcatgaaac ttgagtttaa attttatata 60
taaaactaaa agtaatgctc actttagcaa cacatactaa aattggaacc atactgagaa 120
gaatagcatg acctccgtgc aaacaggaca agcaaatttg tgatgtgttg attaaaaaga 180
aataaataaa tgtgtatatg tgtaacttgt atgtttatgt ggaatacaga ttgggaaata 240
aaatgtattt cttactgtga aaaaaaaaaa aaaaaaaaaa aana 284

<210> 81
<211> 671
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(671)
<223> n = A,T,C or G

<400> 81
gccaccaaca ttccaagcta ccctgggtac ctttgtgcag tagaagctag tgagcatgtg 60
agcaagcggt gtgcacacgg agactcatcg ttataattta ctatctgcca agagtagaaa 120
gaaaggctgg ggatatttgg gttggcttgg ttttgatttt ttgcttgttt gtttgttttg 180
tactaaaaca gtattatctt ttgaatatcg tagggacata agtatataca tgttatccaa 240
tcaagatggc tagaatggtg cctttctgag tgtctaaaac ttgacacccc tggtaaatct 300
ttcaacacac ttccactgcc tgcgtaatga agttttgatt catttttaac cactggaatt 360
tttcaatgcc gtcatttttca gttagatnat tttgcacttt gagattaaaa tgccatgtct 420
atttgattag tctttatttttt ttatttttac aggcttatca gtctcactgt tggctgtcat 480
tgtgacaaag tcaaataaac ccccnaggac aacacacagt atgggatcac atattgtttg 540
acattaagct ttggccaaaa aatgttgcat gtgttttacc tcgacttgct aaatcaatan 600
canaaaggct ggctnataat gttggtggtg aaataattaa tnantaacca aaaaaaaaan 660
aaaaaaaaaa a 671

<210> 82
<211> 217
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(217)
<223> n = A,T,C or G

<400> 82
ctgcagatgt ttcttgaatg ctttgtcaaa ttaanaaagt taaagtgcaa taatgtttga 60
agacaataag tggtggtgta tcttgtttct aataagataa actttttttgt ctttgcttta 120
tcttattagg gagttgtatg tcagtgtata aaacatactg tgtggtataa caggcttaat 180
aaattcttta aaaggaaaaa aaaaaaaaaa aaaaaaa 217

<210> 83
<211> 460
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(460)
<223> n = A,T,C or G

<400> 83
cgcgagtggg agcaccagga tctcgggctc ggaacgagac tgcacggatt gttttaagaa 60
aatggcagac aaaccagaca tgggggaaat cgccagcttc gatnaggcca agctgaanaa 120
aacggagacg caggagaaga acaccctgcc gaccaaagag accattgagc angagaagcg 180
gagtgaaatt tcctaagatc ctggaggatt tcctaccccc gtcctcttcg agaccccagt 240
cgtgatgtgg aggaagagcc acctgcaaga tggacacgag ccacaagctg cactgtgaac 300
ctgggcactc cgcgccgatg ccaccggcct gtgggtctct gaagggaccc cccccaatcg 360
gactgccaaa ttctccggtt tgccccggga tattatacaa nattatttgt atgaataatg 420
annataaaac acacctcgtg gcancaaana aaaaaaaaaa 460

<210> 84
<211> 323
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(323)
<223> n = A,T,C or G

<400> 84
tggtggatct tggctctgtg gagctgctgg gacgggatct aaaagactat tctggaagct 60
gtggtccaan gcattttgct ggcttaacgg gtcccggaac aaaggacacc agctctctaa 120
aattgaagtt tacccganat aacaatcttt tgggcagaga tgcctatttt aacaaaacnc 180
gtcccctgcgc aacaacnaac aatctctggg aaataccggc catgaacntg ctgtctcaat 240
cnancatctc tctagctgac cgatcatatc gtcccagatt actacanatc ataataattg 300
atttcctgta naaaaaaaaa aaa 323

<210> 85
<211> 771
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 85
aaactgggta ctcaacactg agcagatctg ttctttgagc taaaaaccat gtgctgtacc 60
aanagtttgc tcctggctgc tttgatgtca gtgctgctac tccacctctg cggcgaatca 120
gaagcaagca actttgactg ctgtcttgga tacacagacc gtattcttca tcctaaattt 180
attgtgggct tcacacggca gctggccaat gaaggctgtg acatcaatgc tatcatcttt 240
cacacaaaga aaaagttgtc tgtgtgcgca aatccaaaac agacttgggt gaaatatatt 300
gtgcgtctcc tcagtaaaaa agtcaagaac atgtaaaaac tgtggctttt ctggaatgga 360
attggacata gcccaagaac agaaagaact tgctggggtt ggaggtttca cttgcacatc 420
atggganggtt tagtgcttat cttatttgtg cctcctggac ttgtccaatt natgaagtta 480
atcatattgc atcatanttt gctttgttta acatcacatt naaattaaac tgtattttat 540
gttatttata gctntaggtt ttctgtgttt aacttttttat acnaantttc ctaaactatt 600
ttggtntant gcaanttaaa aattatattt ggggggggaa taaatattgg antttctgca 660
gccacaagct ttttttaaaa aaccantaca nccnngttaa atggtnggtc ccnaatggtt 720
tttgcttttn antagaaaat ttnttagaac natttgaaaa aaaaaaaaaa a 771

<210> 86
<211> 628
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(628)
<223> n = A,T,C or G

<400> 86
actagtttgc tttacatttt tgaaaagtat tatttttgtc caagtgctta tcaactaaac 60
cttgtgttag gtaagaatgg aatttattaa gtgaatcagt gtgacccttc ttgtcataag 120
attatcttaa agctgaagcc aaaatatgct tcaaaagaaa angactttat tgttcattgt 180
agttcataca ttcaaagcat ctgaactgta gtttctatag caagccaatt acatccataa 240
gtggagaang aaatagatta atgtcnaagt atgattggtg gagggagcaa ggttgaagat 300
aatctggggt tgaaattttc tagttttcat tctgtacatt tttagttnga catcagattt 360
gaaatattaa tgtttacctt tcaatgtgtg gtatcagctg gactcantaa cacccctttc 420
ttcccttnggg gatggggaat ggattattgg aaaatggaaa gaaaaaagta cttaaagcct 480
tcctttcnca gtttctggct cctaccctac tgatttancc agaataagaa aacattttat 540
catcntctgc tttattccca ttaatnaant tttgatgaat aaatctgctt ttatgcnnac 600
ccaaggaatt nagtggnttc ntcnttgt 628

<210> 87
<211> 518
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature

<222> (1)...(518)
<223> n = A,T,C or G

<400> 87
ttttttattt tttttagaga gtagttcagc ttttatttat aaatttattg cctgttttat 60
tataacaaca ttatactgtt tatggtttaa tacatatggt tcaaaatgta taatacatca 120
agtagtacag ttttaaaatt ttatgcttaa aacaagtttt gtgtaaaaaa tgcagataca 180
ttttacatgg caaatcaatt tttaagtcat cctaaaaatt gatttttttt tgaaatttaa 240
aaacacattt aatttcaatt tctctcttat ataaccttta ttactatagc atggtttcca 300
ctacagttta acaatgcagc aaaattccca tttcacggta aattgggttt taagcggcaa 360
ggttaaaatg ctttgaggat cctnaatacc ctttgaactt caaatgaagg ttatggttgt 420
naatttaacc ctcatgccat aagcagaagc acaagtttag ctgcattttg ctctaaactg 480
taaaancgag ccccccgttg aaaaagcaaa agggaccc 518

<210> 88
<211> 1844
<212> DNA
<213> Homo sapien

<400> 88
gagacagtga atcctagtat caaaggattt ttggcctcag aaaaagttgt tgattatttt 60
tattttattt tatttttcga gactccgtct caaaaaaaaa aaaaaaaaaa agaatcacaa 120
ggtatttgct aaagcatttt gagctgcttg gaaaaaggga agtagttgca gtagagtttc 180
ttccatcttc ttggtgctgg gaagccatat atgtgtcttt tactcaagct aaggggtata 240
agcttatgtg ttgaatttgc tacatctata tttcacatat tctcacaata agagaatttt 300
gaaatagaaa tatcatagaa catttaagaa agtttagtat aaataatatt ttgtgtgttt 360
taatcccttt gaagggatct atccaaagaa aatattttac actgagctcc ttcctacacg 420
tctcagtaac agatcctgtg ttagtctttg aaaatagctc atttttaaa tgtcagtgag 480
tagatgtagc atacatatga tgtataatga cgtgtattat gttaacaatg tctgcagatt 540
ttgtaggaat acaaaacatg gccttttta taagcaaaac gggccaatga ctagaataac 600
acatagggca atctgtgaat atgtattata agcagcattc cagaaaagta gttggtgaaa 660
taattttcaa gtcaaaaagg gatatggaaa gggaattatg agtaacctct atttttaag 720
ccttgctttt aaattaaacg ctacagccat ttaagccttg aggataataa agcttgagag 780
taataatgtt aggttagcaa aggtttagat gtatcacttc atgcatgcta ccatgatagt 840
aatgcagctc ttcgagtcat ttctggtcat tcaagatatt cacccttttg cccatagaaa 900
gcaccctacc tcacctgctt actgacattg tcttagctga tcacaagatc attatcagcc 960
tccattattc cttactgtat ataaaataca gagttttata ttttcctttc ttcgtttttc 1020
accatattca aaacctaaat ttgtttttgc agatggaatg caaagtaatc aagtgttcgt 1080
gctttcacct agaagggtgt ggtcctgaag gaaagaggtc cctaaatatc ccccaccctg 1140
ggtgctcctc cttccctggt accctgacta ccagaagtca ggtgctagag cagctggaga 1200
agtgcagcag cctgtgcttc cacagatggg ggtgctgctg caacaaggct ttcaatgtgc 1260
ccatcttagg gggagaagct agatcctgtg cagcagcctg gtaagtcctg aggaggttcc 1320
attgctcttc ctgctgctgt cctttgcttc tcaacggggc tcgctctaca gtctagagca 1380
catgcagcta acttgtgcct ctgcttatgc atgagggtta aattaacaac cataaccttc 1440
atttgaagtt caaaggtgta ttcaggatcc tcaaagcatt ttaaccttgc cgcttaaaac 1500
ccaatttacc gtgaaatggg aattttgctg cattgttaaa ctgtagtgga aaccatgcta 1560
tagtaataaa ggttatataa gagagaaatt gaaattaaat gtgtttttaa atttcaaaaa 1620
aaaatcaatc tttaggatga cttaaaaatt gatttgccat gtaaaatgta tctgcatttt 1680
ttacacaaaa cttgttttaa gcataaaatt ttaaaactgt actacttgat gtattataca 1740
ttttgaacca tatgtattaa accataaaca gtataatgtt gttataataa aacaggcaat 1800
aaatttataa ataaaagctg aaaaaaaaaa aaaaaaaaaa aaaa 1844

<210> 89
<211> 523
<212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(523)
<223> n = A,T,C or G

<400> 89
ttttttttt tttttttagt caatccacat ttattgatca cttattatgt accaggcact 60
gggataaaga tgactgttag tcactcacag taaggaagaa aactagcaaa taagacgatt 120
acaatatgat gtagaaaatg ctaagccaga gatatagaaa ggtcctattg ggtccttctg 180
tcaccttgtc tttccacatc cctacccttc acaggccttc cctccagctt cctgcccccg 240
ctccccactg cagatcccct gggatttttgc ctagagctaa acgagganat gggccccctg 300
gccctggcat gacttgaacc caaccacaga ctgggaaagg gagcctttcg anagtggatc 360
actttgatna gaaaacacat agggaattga agagaaantc cccaaatggc cacccgtgct 420
ggtgctcaag aaaagtttgc agaatggata aatgaaggat caagggaatt aatanatgaa 480
taattgaatg gtggctcaat aagaatgact ncnttgaatg acc 523

<210> 90
<211> 604
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(604)
<223> n = A,T,C or G

<400> 90
ccagtgtggt ggaatgcaaa gattaccccg gaagctttcg agaagctggg attccctgca 60
gcaaaggaaa tagccaatat gtgtcgtttc tatgaaatga agccagaccg agatgtcaat 120
ctcacccacc aactaaatcc caaagtcaaa agcttcagcc agtttatctc agagaaccag 180
gggagccttc aagggcatgt agaaaatcag ctgttcagat aggcctctgc accacacagc 240
ctctttcctc tctgatcctt ttcctctttа cggcacaaca ttcatgtttg acagaacatg 300
ctggaatgca attgtttgca acaccgaagg atttcctgcg gtcgcctctt cagtaggaag 360
cactgcattg gtgataggac acggtaattt gattcacatt taacttgcta gttagtgata 420
aggggtggta cacctgtttg gtaaaatgag aagcctcgga aacttgggag cttctctcct 480
accactaatg gggagggcag attattactg ggatttctcc tggggtgaat taatttcaag 540
ccctaattgc tgaaattccc ctnggcaggc tccagttttc tcaactgcat tgcaaaattc 600
cccc 604

<210> 91
<211> 858
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(858)
<223> n = A,T,C or G

<400> 91
ttttttttt ttttttttta tgattattat ttttttatt gatctttaca tcctcagtgt 60
tggcagagtt tctgatgctt aataaacatt tgtttctgatc agataagtgg aaaaaattgt 120
catttcctta ttcaagccat gcttttctgt gatattctga tcctagttga acatacagaa 180

ataaatgtct aaaacagcac ctcgatttct gtctataaca ggactaagtt cactgtgatc 240
ttaaataagc ttggctaaaa tgggacatga gtggaggtag tcacacttca gcgaagaaag 300
agaatctcct gtataatctc accaggagat tcaacgaatt ccaccacact ggactagtgg 360
atcccccggg ctgcaggaat tcgatatcaa gcttatcgat accgtcgacc tcgaggggggg 420
gcccggtacc caattcgccc tatagtgagt cgtattacgc gcgctcactg gccgtcgttt 480
tacaacgtcg tgactgggaa aaccctggcg ttacccaact taatcgcctt gcagcacatc 540
ccccttcgc cagctggcgt aatagcgaan agcccgcacc gatcgccctt ncaacagttg 600
cgcagcctga atggcgaatg ggacgcgccc tgtagcggcg cattaaagcg cggcngggtg 660
tggnggntcc cccacgtgac cgntacactt ggcagcgcct tacgccggtc nttcgctttc 720
ttcccttcct ttctcgcacc gttcgccggg tttccccgnn agctnttaat cgggggnctc 780
cctttanggg tncnaattaa nggnttacng gaccttngan cccaaaaact ttgattaggg 840
ggaaggtccc cgaagggg 858

<210> 92
<211> 585
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(585)
<223> n = A,T,C or G

<400> 92
gttgaatctc ctggtgagat tatacaggag attctctttc ttcgctgaag tgtgactacc 60
tccacttcatg tcccatttta gccaagctta tttaagatca cagtgaactt agtcctgtta 120
tagacgagaa tcgaggtgct gttttagaca tttatttctg tatgttcaac taggatcaga 180
atatcacaga aaagcatggc ttgaataagg aaatgacaat ttttttccact tatctgatca 240
gaacaaatgt ttattaagca tcagaaactc tgccaacact gaggatgtaa agatcaataa 300
aaaaaataat aatcatnann naaanannan nngaagggcg gccgccaccg cggtggagct 360
ccagcttttg ttccctttag tgagggttaa ttgcgcgctt ggcgttaatc atggtcatag 420
ctgtttcctg tgtgaaattg ttatccggct cacaattccn cncaacatac gagccgggaa 480
gcntnangtg taaaagcctg ggggtgccta attgagtgag ctnactcaca ttaattgngt 540
tgcgctccac ttgcccgctt ttccantccg ggaaacctgt tcgnc 585

<210> 93
<211> 567
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(567)
<223> n = A,T,C or G

<400> 93
cggcagtgtt gctgtctgcg tgtccacctt ggaatctggc tgaactggct gggaggacca 60
agactgcggc tggggtgggc anggaaggga accgggggct gctgtgaagg atcttggaac 120
ttcccctgtac ccaccttccc cttgcttcat gtttgtanag gaaccttgtg ccggccaagc 180
ccagtttcct tgtgtgatac actaatgtat ttgcttttttt tgggaaatan anaaaaatca 240
attaaattgc tantgtttct ttgaannnnn nnnnnnnnnn nnnnnnnggg ggggncgccc 300
ccncggngga aacnccccct tttgttcccct ttaattgaaa ggttaattng cncncntggc 360
gttaanccnt gggccaaanc tngttncccg tgntgaaatt gttnatcccc tcccaaattc 420
cccccennce ttccaaaccc ggaaancctn annntgttna ancccggggg gttgcctaan 480
ngnaattnaa ccnaacccce ntttaaatng nntttgcncn ccacnngccc cnctttccca 540

nttcggggaa aaccctntcc gtgccca 567

<210> 94
<211> 620
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(620)
<223> n = A,T,C or G

<400> 94
actagtcaaa aatgctaaaa taatttggga gaaaatattt tttaagtagt gttatagttt 60
catgtttatc ttttattatg ttttgtgaag ttgtgtcttt tcactaatta cctatactat 120
gccaatattt ccttatatct atccataaca tttatactac atttgtaana naatatgcac 180
gtgaaactta acactttata aggtaaaaat gaggtttcca anatttaata atctgatcaa 240
gttcttgtta tttccaaata gaatggactt ggtctgttaa gggctaagga gaagaggaag 300
ataaggttaa aagttgttaa tgaccaaaca ttctaaaaga aatgcaaaaa aaaagtttat 360
tttcaagcct tcgaactatt taaggaaagc aaaatcattt cctaaatgca tatcatttgt 420
gagaatttct cattaatatc ctgaatcatt catttcacta aggctcatgt tnactccgat 480
atgtctctaa gaaagtacta tttcatggtc caaacctggt tgccatantt gggtaaaggc 540
tttcccttaa gtgtgaaant atttaaaatg aaatttttcct ctttttaaaa attctttana 600
agggttaagg gtgttgggga 620

<210> 95
<211> 470
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(470)
<223> n = A,T,C or G

<400> 95
ctcgaccttc tctgcacagc ggatgaaccc tgagcagctg aagaccagaa aagccactat 60
nactttntgc ttaattcang agcttacang attcttcaaa gagtgngtcc agcatccttt 120
gaaacatgag ttcttaccag cagaagcaga cctttacccc accacctcag cttcaacagc 180
agcaggtgaa acaacccatc cagcctccac ctnaggaaat atttgttccc acaaccaagg 240
agccatgcca ctcaaaggtt ccacaacctg naaacacaaa nattccagag ccaggctgta 300
ccaaggtccc tgagccaggg ctgtaccaan gtccctgagc caggttgtac caangtccct 360
gagccaggat gtaccaaggt ccctgancca ggttgtccaa ggtccctgag ccaggctaca 420
ccaagggcct gngccaggca gcatcaangt ccctgaccaa ggcttatcaa 470

<210> 96
<211> 660
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(660)
<223> n = A,T,C or G

<400> 96
ttttttttt ttttttttt ggaattaaaa gcaatttaat gagggcagag caggaaacat 60
gcatttcttt tcattcgaat cttcagatga accctgagca gccgaagacc agaaaagcca 120
tgaagacttt ctgcttaatt caggggctta caggattctt cagagtgtgt gtgaacaaaa 180
gctttatagt acgtattttt aggatacaaa taagagagag actatggctt ggggtgagaa 240
tgtactgatt acaaggtcta cagacaatta agacacagaa acagatggga agagggtgnc 300
cagcatctgg nggttggctt ctcaagggct tgtctgtgca ccaaattact tctgcttggn 360
cttctgctga gctgggcctg gagtgaccgt tgaaggacat ggctctggta cctttgtgta 420
gcctgncaca ggaactttgg tgtatccttg ctcaggaact ttgatggcac ctggctcagg 480
aaacttgatg aagccttggt caagggacct tgatgcttgc tggctcaggg accttggngn 540
ancctgggct canggacctt tgncncaacc ttggcttcaa gggacccttg gnacatcctg 600
gcnnagggac ccttgggncc aaccctgggc ttnagggacc ctttggntnc nanccttggc 660

<210> 97
<211> 441
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(441)
<223> n = A,T,C or G

<400> 97
gggaccatac anagtattcc tctcttcaca ccaggaccag ccactgttgc agcatgagtt 60
cccagcagca gaagcagccc tgcatcccac cccctcagct tcagcagcag caggtgaaac 120
agccttgcca gcctccacct caggaaccat gcatccccaa aaccaaggag ccctgccacc 180
ccaaggtgcc tgagccctgc caccccaaag tgcctgagcc ctgccagccc aaggttccag 240
agccatgcca ccccaaggtg cctgagcccc gcccttcaat agtcactcca gcaccagccc 300
agcagaanac caagcagaag taatgtggtc cacagccatg cccttgagga gccggccacc 360
agatgctgaa tcccctatcc cattctgtgt atgagtccca tttgccttgc aattagcatt 420
ctgtctcccc caaaaaaaaa a 441

<210> 98
<211> 600
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(600)
<223> n = A,T,C or G

<400> 98
gtattcctct cttcacacca ggaccagcca ctgttgcagc atgagttccc agcagcagaa 60
gcagccctgc atcccacccc ctcagcttca gcagcagcag gtgaaacagc cttgccagcc 120
tccacctcag gaaccatgca tccccaaaac caaggagccc tgccacccca aggtgcctga 180
gccctgccac cccaaagtgc ctgagccctg ccagcccaag gttccagagc catgccaccc 240
caaggtgcct gagccctgcc cttcaatagt cactccagca ccagcccagc agaanaccaa 300
gcagaagtaa tgtggtccac agccatgccc ttgaggagcc ggccaccana tgctgaatcc 360
cctatcccat tctgtgtatg agtcccattt gccttgcaat tagcattctg tctccccaa 420
aaaagaatgt gctatgaagc tttctttcct acacactctg agtctctgaa tgaagctgaa 480
ggtcttaant acaganctag ttttcagctg ctcagaattc tctgaagaaa agatttaaga 540
tgaaaggcaa atgattcagc tccttattac cccattaaat tcnctttcaa ttccaaaaaa 600

<210> 99
<211> 667
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(667)
<223> n = A,T,C or G

<400> 99
actagtgact gagttcctgg caaagaaatt tgacctggac cagttgataa ctcatgtttt 60
accatttaaa aaaatcagtg aaggatttga gctgctcaat tcaggacaaa gcattcgaac 120
ggtcctgacg ttttgagatc caaagtggca ggaggtctgt gttgtcatgg tgaactggag 180
tttctcttgt gagagttccc tcatctgaaa tcatgtatct gtctcacaaa tacaagcata 240
agtagaagat ttgttgaaga catagaaccc ttataaagaa ttattaacct ttataaacat 300
ttaaagtctt gtgagcacct gggaattagt ataataacaa tgttnatatt tttgatttac 360
attttgtaag gctataattg tatcttttaa gaaaacatac cttggatttc tatgttgaaa 420
tggagatttt taagagtttt aaccagctgc tgcagatata ttactcaaaa cagatatagc 480
gtataaagat atagtaaatg catctcctag agtaatattc acttaacaca ttggaaacta 540
ttatttttta gatttgaata tnaatgttat tttttaaaca cttgttatga gttacttggg 600
attacatttt gaaatcagtt cattccatga tgcanattac tgggattaga ttaagaaaga 660
cggaaaa 667

<210> 100
<211> 583
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(583)
<223> n = A,T,C or G

<400> 100
gttttgtttg taagatgatc acagtcatgt tacactgatc taaaggacat atatataacc 60
ctttaaaaaa aaaatcactg cctcattctt atttcaagat gaatttctat acagactaga 120
tgtttttctg aagatcaatt agacattttg aaaatgattt aaagtgtttt ccttaatgtt 180
ctctgaaaac aagtttcttt tgtagtttta accaaaaaag tgccctttt gtcactggat 240
tctcctagca ttcatgattt ttttttcata caatgaaatt aaaattgcta aaatcatgga 300
ctggctttct ggttggattt caggtaagat gtgtttaagg ccagagcttt tctcagtatt 360
tgatttttt ccccaatatt tgatttttta aaaatataca catnggtgct gcatttatat 420
ctgctggttt aaaattctgt catatttcac ttctagcctt ttagttatgg caaatcatat 480
tttactttta cttaaagcat ttggtnattt ggantatctg gttctannct aaaaaaanta 540
attctatnaa ttgaantttt ggtactcnnc catatttgga tcc 583

<210> 101
<211> 592
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(592)
<223> n = A,T,C or G

<400> 101
gtggagacgt acaaagagca gccgctcaag acacctggga agaaaaagaa aggcaagccc 60
gggaaacgca aggagcagga aaagaaaaaa cggcgaactc gctctgcctg gttagactct 120
ggagtgactg ggagtgggct agaaggggac cacctgtctg acacctccac aacgtcgctg 180
gagctcgatt cacggaggca ttgaaatttt cagcaganac cttccaagga catattgcag 240
gattctgtaa tagtgaacat atggaaagta ttagaaatat ttattgtctg taaatactgt 300
aaatgcattg gaataaaact gtctccccca ttgctctatg aaactgcaca ttggtcattg 360
tgaatatttt ttttttgcc aaggctaatc caattattat tatcacattt accataattt 420
attttgtcca ttgatgtatt tattttgtaa atgtatcttg gtgctgctga atttctatat 480
tttttgtaca taatgcnttt anatatacct atcaagtttg ttgataaatg acncaatgaa 540
gtgncncnan ttggnggttg aatttaatga atgcctaatt ttattatccc aa 592

<210> 102
<211> 587
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(587)
<223> n = A,T,C or G

<400> 102
cgtcctaagc acttagacta catcagggaa gaacacagac cacatccctg tcctcatgcg 60
gcttatgttt tctggaagaa agtggagacc nagtccttgg ctttagggct ccccggctgg 120
gggctgtgca ntccggtcag ggcgggaagg gaaatgcacc gctgcatgtg aacttacagc 180
ccaggcggat gcccccttccc ttagcactac ctggcctcct gcatcccctc gcctcatgtt 240
cctcccacct tcaaanaatg aanaacccca tgggcccagc cccttgcccc ggggaaccaa 300
ggcagccttc caaaactcag gggctgaagc anactattag ggcaggggct gactttgggt 360
gacactgccc attcccctctc agggcagctc angtcacccn ggnctcttga acccagcctg 420
ttcctttgaa aaagggcaaa actgaaaagg gcttttccta naaaaagaaa aaccagggaa 480
ctttgccagg gcttcnntnt taccaaaacn ncttctcnng gatttttaat tccccattng 540
gcctccactt accnggggcn atgccccaaa attaanaatt tcccatc 587

<210> 103
<211> 496
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(496)
<223> n = A,T,C or G

<400> 103
anaggactgg ccctacntgc tctctctcgt cctacctatc aatgcccaac atggcagaac 60
ctgcanccct tggncactgc anatggaaac ctctcagtgt cttgacatca ccctacccnt 120
gcggtgggtc tccaccacaa ccactttgac tctgtggtcc ctgnanggtg gnttctcctg 180
actggcagga tggaccttan ccnacatatc cctctgttcc ctctgctnag anaaagaatt 240
cccttaacat gatataatcc acccatgcaa ntngctactg gcccagctac catttaccat 300
ttgcctacag aatttcattc agtctacact ttggcattct ctctggcgat agagtgtggc 360
tgggctgacc gcaaaaggtg ccttacacac tggcccccac cctcaaccgt tgacncatca 420
gangcttgcc tcctccttct gattnnnccc catgttggat atcagggtgc tcnagggatt 480
ggaaaagaaa caaaac 496

<210> 104
<211> 575
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(575)
<223> n = A,T,C or G

<400> 104
gcacctgctc tcaatccnnc tctcaccatg atcctccgcc tgcanaaact cctctgccaa 60
ctatggangt ggtttcnggg gtggctcttg ccaactggga agaagccgtg gtgtctctac 120
ctgttcaact cngtttgtgt ctgggggatc aactnggggc tatggaagcg gctnaactgt 180
tgttttggtg gaagggctgg taattggctt tgggaagtng cttatngaag ttggcctngg 240
gaagttgcta ttgaaagtng ccntggaagt ngntttggtg gggggttttg ctggtggcct 300
ttgttnaatt tgggtgcttt gtnaatggcg gccccctcnc ctgggcaatg aaaaaaatca 360
ccnatgcngn aaacctcnac nnaacagcct gggcttcccc cacctcgaaa aaagttgctc 420
ccccccccaaa aaaggncaan cccctcaann tggaangttg aaaaaatcct cgaatgggga 480
ncccnaaaac aaaaancccc ccntttcccn gnaanggggg aaatacccncc cccccactta 540
cnaaaaccct tntaaaaaac ccccgggaa aaaaa 575

<210> 105
<211> 619
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(619)
<223> n = A,T,C or G

<400> 105
cactagtagg atagaaacac tgtgtcccga gagtaaggag agaagctact attgattaga 60
gcctaaccca ggttaactgc aagaagaggc gggatacttt cagctttcca tgtaactgta 120
tgcataaagc caatgtagtc cagtttctaa gatcatgttc caagctaact gaatcccact 180
tcaatacaca ctcatgaact cctgatggaa caataacagg cccaagcctg tggtatgatg 240
tgcacacttg ctagactcan aaaaaatact actctcataa atgggtggga gtattttggt 300
gacaacctac tttgcttggc tgagtgaagg aatgatattc atatattcat ttattccatg 360
gacatttagt tagtgctttt tatataccag gcatgatgct gagtgacact cttgtgtata 420
tttccaaatt tttgtacagt cgctgcacat atttgaaatc atatattaag acttccaaaa 480
aatgaagtcc ctggtttttc atggcaactt gatcagtaaa ggattcncct ctgtttggta 540
cttaaaacat ctactatatn gttnanatga aattcctttt ccccncctcc cgaaaaaana 600
aagtggtggg gaaaaaaaa 619

<210> 106
<211> 506
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(506)
<223> n = A,T,C or G

<400> 106
cattggtnct ttcatttgct ntggaagtgt nnatctctaa cagtggacaa agttcccngt 60
gccttaaact ctgtnacact tttgggaant gaaaanttng tantatgata ggttattctg 120
angtanagat gttctggata ccattanatn tgccccngt gtcagaggct catattgtgt 180
tatgtaaatg gtatntcatt cgctactatn antcaattng aaatanggtc tttgggttat 240
gaatantnng cagcncanct nanangctgt ctgtngtatt cattgtggtc atagcacctc 300
acancattgt aacctcnatc nagtgagaca nactagnaan ttcctagtga tggctcanga 360
ttccaaatgg nctcatntcn aatgtttaaa agttanttaa gtgtaagaaa tacagactgg 420
atgttccacc aactagtacc tgtaatgacn ggcctgtccc aacacatctc ccttttccat 480
gactgtggta ncccgcatcg gaaaaa 506

<210> 107
<211> 452
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(452)
<223> n = A,T,C or G

<400> 107
gttgagtctg tactaaacag taagatatct caatgaacca taaattcaac tttgtaaaaa 60
tcttttgaag catagataat attgtttggt aaatgtttct tttgtttggt aaatgtttct 120
tttaaagacc ctcctattct ataaaactct gcatgtagag gcttgtttac ctttctctct 180
ctaaggttta caataggagt ggtgatttga aaaatataaa attatgagat tggttttcct 240
gtggcataaa ttgcatcact gtatcatttt cttttttaac cggtaagant ttcagtttgt 300
tggaaagtaa ctgtganaac ccagtttccc gtccatctcc cttagggact acccatagaa 360
catgaaaagg tccccacnga agcaagaaga taagtctttc atggctgctg gttgcttaaa 420
ccactttaaa accaaaaaat tccccttgga aa 452

<210> 108
<211> 502
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(502)
<223> n = A,T,C or G

<400> 108
atcttcttcc cttaattagt tnttatttat ntattaaatt ttattgcatg tcctggcaaa 60
caaaaagaga ttgtagattg gcttctggct ccccaaaagc ccataacaga aagtaccaca 120
agaccncaac tgaagcttaa aaaatctatc acatgtataa tacctttnga agaacattaa 180
tanagcatat aaaactttta acatntgctt aatgttgtnc aattataaaa ntaatngaaa 240
aaaatgtccc tttaacatnc aatatcccac atagtgttat ttnaggggat taccnngnaa 300
naaaaaaagg gtagaaggga tttaatgaaa actctgcttn ccatttctgt ttanaaacgt 360
ctccagaaca aaaacttntc aantctttca gctaaccgca tttgagctna ggccactcaa 420
aaactccatt agncccactt tctaanggtc tctanagctt actaancctt ttgacccctt 480
accctggnta ctcctgccct ca 502

<210> 109
<211> 1308

<212> DNA
<213> Homo sapien

<400> 109
acccgaggtc tcgctaaaat catcatggat tcacttggcg ccgtcagcac tcgacttggg 60
tttgatcttt tcaaagagct gaagaaaaca aatgatggca acatcttctt ttcccctgtg 120
ggcatcttga ctgcaattgg catggtcctc ctggggaccc gaggagccac cgcttcccag 180
ttggaggagg tgtttcactc tgaaaaagag acgaagagct caagaataaa ggctgaagaa 240
aaagaggtga ttgagaacac agaagcagta catcaacaat tccaaaagtt tttgactgaa 300
ataagcaaac tcactaatga ttatgaactg aacataacca acaggctgtt tggagaaaaa 360
acatacctct tccttcaaaa atacttagat tatgttgaaa aatattatca tgcatcttctg 420
gaacctgttg attttgtaaa tgcagccgat gaaagtcgaa agaagattaa ttcctgggtt 480
gaaagcaaaa caaatgaaaa aatcaaggac ttgttcccag atggctctat tagtagctct 540
accaagctgg tgctggtgaa catggtttat tttaaagggc aatgggacag ggagtttaag 600
aaagaaaata ctaaggaaga gaaattttgg atgaataaga gcacaagtaa atctgtacag 660
atgatgacac agagccattc ctttagcttc actttcctgg aggacttgca ggccaaaatt 720
ctagggattc catataaaaa caacgaccta agcatgtttg tgcttctgcc caacgacatc 780
gatggcctgg agaagataat agataaaata agtcctgaga aattggtaga gtggactagt 840
ccagggcata tggaagaaag aaaggtgaat ctgcacttgc cccggtttga ggtggaggac 900
agttacgatc tagaggcggt cctggctgcc atggggatgg gcgatgcctt cagtgagcac 960
aaagccgact actcgggaat gtcgtcaggc tccgggttgt acgcccagaa gttcctgcac 1020
agttcctttg tggcagtaac tgaggaaggc accgaggctg cagctgccac tggcataggc 1080
tttactgtca catccgcccc aggtcatgaa aatgttcact gcaatcatcc cttcctgttc 1140
ttcatcaggc acaatgaatc caacagcatc ctcttcttcg gcagattttc ttctccttaa 1200
gatgatcgtt gccatggcat tgctgctttt agcaaaaaac aactaccagt gttactcata 1260
tgattatgaa aatcgtccat tcttttaaat ggtggctcac ttgcattt 1308

<210> 110
<211> 391
<212> PRT
<213> Homo sapien

<400> 110
Met Asp Ser Leu Gly Ala Val Ser Thr Arg Leu Gly Phe Asp Leu Phe
1 5 10 15
Lys Glu Leu Lys Lys Thr Asn Asp Gly Asn Ile Phe Phe Ser Pro Val
20 25 30
Gly Ile Leu Thr Ala Ile Gly Met Val Leu Leu Gly Thr Arg Gly Ala
35 40 45
Thr Ala Ser Gln Leu Glu Glu Val Phe His Ser Glu Lys Glu Thr Lys
50 55 60
Ser Ser Arg Ile Lys Ala Glu Glu Lys Glu Val Ile Glu Asn Thr Glu
65 70 75 80
Ala Val His Gln Gln Phe Gln Lys Phe Leu Thr Glu Ile Ser Lys Leu
85 90 95
Thr Asn Asp Tyr Glu Leu Asn Ile Thr Asn Arg Leu Phe Gly Glu Lys
100 105 110
Thr Tyr Leu Phe Leu Gln Lys Tyr Leu Asp Tyr Val Glu Lys Tyr Tyr
115 120 125
His Ala Ser Leu Glu Pro Val Asp Phe Val Asn Ala Ala Asp Glu Ser
130 135 140
Arg Lys Lys Ile Asn Ser Trp Val Glu Ser Lys Thr Asn Glu Lys Ile
145 150 155 160
Lys Asp Leu Phe Pro Asp Gly Ser Ile Ser Ser Ser Thr Lys Leu Val
165 170 175

```
Leu Val Asn Met Val Tyr Phe Lys Gly Gln Trp Asp Arg Glu Phe Lys
            180                 185                 190
Lys Glu Asn Thr Lys Glu Glu Lys Phe Trp Met Asn Lys Ser Thr Ser
        195                 200                 205
Lys Ser Val Gln Met Met Thr Gln Ser His Ser Phe Ser Phe Thr Phe
    210                 215                 220
Leu Glu Asp Leu Gln Ala Lys Ile Leu Gly Ile Pro Tyr Lys Asn Asn
225                 230                 235                 240
Asp Leu Ser Met Phe Val Leu Leu Pro Asn Asp Ile Asp Gly Leu Glu
                245                 250                 255
Lys Ile Ile Asp Lys Ile Ser Pro Glu Lys Leu Val Glu Trp Thr Ser
            260                 265                 270
Pro Gly His Met Glu Glu Arg Lys Val Asn Leu His Leu Pro Arg Phe
        275                 280                 285
Glu Val Glu Asp Ser Tyr Asp Leu Glu Ala Val Leu Ala Ala Met Gly
    290                 295                 300
Met Gly Asp Ala Phe Ser Glu His Lys Ala Asp Tyr Ser Gly Met Ser
305                 310                 315                 320
Ser Gly Ser Gly Leu Tyr Ala Gln Lys Phe Leu His Ser Ser Phe Val
                325                 330                 335
Ala Val Thr Glu Glu Gly Thr Glu Ala Ala Ala Ala Thr Gly Ile Gly
            340                 345                 350
Phe Thr Val Thr Ser Ala Pro Gly His Glu Asn Val His Cys Asn His
        355                 360                 365
Pro Phe Leu Phe Phe Ile Arg His Asn Glu Ser Asn Ser Ile Leu Phe
    370                 375                 380
Phe Gly Arg Phe Ser Ser Pro
385                 390
```

<210> 111
<211> 1419
<212> DNA
<213> Homo sapien

<400> 111

```
ggagaactat aaattaagga tcccagctac ttaattgact tatgcttcct agttcgttgc      60
ccagccacca ccgtctctcc aaaaacccga ggtctcgcta aaatcatcat ggattcactt     120
ggcgccgtca gcactcgact tgggtttgat cttttcaaag agctgaagaa aacaaatgat     180
ggcaacatct tctttttcccc tgtgggcatc ttgactgcaa ttggcatggt cctcctgggg     240
acccgaggag ccaccgcttc ccagttggag gaggtgtttc actctgaaaa agagacgaag     300
agctcaagaa taaaggctga agaaaaagag gtggtaagaa taaaggctga aggaaaagag     360
attgagaaca cagaagcagt acatcaacaa ttccaaaagt ttttgactga aataagcaaa     420
ctcactaatg attatgaact gaacataacc aacaggctgt ttggagaaaa aacatacctc     480
ttccttcaaa aatacttaga ttatgttgaa aaatattatc atgcatctct ggaacctgtt     540
gattttgtaa atgcagccga tgaaagtcga aagaagatta attcctgggt tgaaagcaaa     600
acaaatgaaa aaatcaagga cttgttccca gatggctcta ttagtagctc taccaagctg     660
gtgctggtga acatggttta ttttaaaggg caatgggaca gggagtttaa gaaagaaaat     720
actaaggaag agaaattttg gatgaataag agcacaagta aatctgtaca gatgatgaca     780
cagagccatt cctttagctt cactttcctg gaggacttgc aggccaaaat tctagggatt     840
ccatataaaa acaacgacct aagcatgttt gtgcttctgc ccaacgacat cgatggcctg     900
gagaagataa tagataaaat aagtcctgag aaattggtag agtggactag tccagggcat     960
atggaagaaa gaaaggtgaa tctgcacttg ccccggtttg aggtggagga cagttacgat    1020
ctagaggcgg tcctggctgc catggggatg ggcgatgcct tcagtgagca caaagccgac    1080
tactcgggaa tgtcgtcagg ctccgggttg tacgcccaga agttcctgca cagttccttt    1140
gtggcagtaa ctgaggaagg caccgaggct gcagctgcca ctggcatagg ctttactgtc    1200
```

acatccgccc caggtcatga aaatgttcac tgcaatcatc ccttcctgtt cttcatcagg 1260
cacaatgaat ccaacagcat cctcttcttc ggcagatttt cttctcctta agatgatcgt 1320
tgccatggca ttgctgcttt tagcaaaaaa caactaccag tgttactcat atgattatga 1380
aaatcgtcca ttcttttaaa tggtggctca cttgcattt 1419

<210> 112
<211> 400
<212> PRT
<213> Homo sapien

<400> 112

```
Met Asp Ser Leu Gly Ala Val Ser Thr Arg Leu Gly Phe Asp Leu Phe
 1               5                  10                  15
Lys Glu Leu Lys Lys Thr Asn Asp Gly Asn Ile Phe Phe Ser Pro Val
            20                  25                  30
Gly Ile Leu Thr Ala Ile Gly Met Val Leu Leu Gly Thr Arg Gly Ala
        35                  40                  45
Thr Ala Ser Gln Leu Glu Glu Val Phe His Ser Glu Lys Glu Thr Lys
    50                  55                  60
Ser Ser Arg Ile Lys Ala Glu Glu Lys Glu Val Val Arg Ile Lys Ala
65                  70                  75                  80
Glu Gly Lys Glu Ile Glu Asn Thr Glu Ala Val His Gln Gln Phe Gln
                85                  90                  95
Lys Phe Leu Thr Glu Ile Ser Lys Leu Thr Asn Asp Tyr Glu Leu Asn
            100                 105                 110
Ile Thr Asn Arg Leu Phe Gly Glu Lys Thr Tyr Leu Phe Leu Gln Lys
        115                 120                 125
Tyr Leu Asp Tyr Val Glu Lys Tyr Tyr His Ala Ser Leu Glu Pro Val
    130                 135                 140
Asp Phe Val Asn Ala Ala Asp Glu Ser Arg Lys Lys Ile Asn Ser Trp
145                 150                 155                 160
Val Glu Ser Lys Thr Asn Glu Lys Ile Lys Asp Leu Phe Pro Asp Gly
                165                 170                 175
Ser Ile Ser Ser Ser Thr Lys Leu Val Leu Val Asn Met Val Tyr Phe
            180                 185                 190
Lys Gly Gln Trp Asp Arg Glu Phe Lys Lys Glu Asn Thr Lys Glu Glu
        195                 200                 205
Lys Phe Trp Met Asn Lys Ser Thr Ser Lys Ser Val Gln Met Met Thr
    210                 215                 220
Gln Ser His Ser Phe Ser Phe Thr Phe Leu Glu Asp Leu Gln Ala Lys
225                 230                 235                 240
Ile Leu Gly Ile Pro Tyr Lys Asn Asn Asp Leu Ser Met Phe Val Leu
                245                 250                 255
Leu Pro Asn Asp Ile Asp Gly Leu Glu Lys Ile Ile Asp Lys Ile Ser
            260                 265                 270
Pro Glu Lys Leu Val Glu Trp Thr Ser Pro Gly His Met Glu Glu Arg
        275                 280                 285
Lys Val Asn Leu His Leu Pro Arg Phe Glu Val Glu Asp Ser Tyr Asp
    290                 295                 300
Leu Glu Ala Val Leu Ala Ala Met Gly Met Gly Asp Ala Phe Ser Glu
305                 310                 315                 320
His Lys Ala Asp Tyr Ser Gly Met Ser Ser Gly Ser Gly Leu Tyr Ala
                325                 330                 335
Gln Lys Phe Leu His Ser Ser Phe Val Ala Val Thr Glu Glu Gly Thr
            340                 345                 350
```

```
Glu Ala Ala Ala Ala Thr Gly Ile Gly Phe Thr Val Thr Ser Ala Pro
        355                 360                 365
Gly His Glu Asn Val His Cys Asn His Pro Phe Leu Phe Phe Ile Arg
    370                 375                 380
His Asn Glu Ser Asn Ser Ile Leu Phe Phe Gly Arg Phe Ser Ser Pro
385                 390                 395                 400
```

<210> 113
<211> 957
<212> DNA
<213> Homo sapien

<400> 113

```
ctcgaccttc tctgcacagc ggatgaaccc tgagcagctg aagaccagaa aagccactat      60
gactttctgc ttaattcagg agcttacagg attcttcaaa gagtgtgtcc agcatcctct     120
gaaacatgag ttcttaccag cagaagcaga cctttacccc accacctcag cttcaacagc     180
agcaggtgaa acaacccagc cagcctccac ctcaggaaat atttgttccc acaaccaagg     240
agccatgcca ctcaaaggtt ccacaacctg gaaacacaaa gattccagag ccaggctgta     300
ccaaggtccc tgagccaggc tgtaccaagg tccctgagcc aggttgtacc aaggtccctg     360
agccaggatg taccaaggtc cctgagccag gttgtaccaa ggtccctgag ccaggctaca     420
ccaaggtccc tgagccaggc agcatcaagg tccctgacca aggcttcatc aagtttcctg     480
agccaggtgc catcaaagtt cctgagcaag gatacaccaa agttcctgtg ccaggctaca     540
caaaggtacc agagccatgt ccttcaacgg tcactccagg cccagctcag cagaagacca     600
agcagaagta atttggtgca cagacaagcc cttgagaagc caaccaccag atgctggaca     660
ccctcttccc atctgtttct gtgtcttaat tgtctgtaga ccttgtaatc agtacatttc     720
caccccaagc catagtctct ctcttatttg tatcctaaaa atacggtact ataaagcttt     780
tgttcacaca cactctgaag aatcctgtaa gccccctgaat taagcagaaa gtcttcatgg     840
ctttttctggt ctttggctgc tcagggttca tctgaagatt cgaatgaaaa gaaatgcatg     900
tttcctgctc tgccctcatt aaattgcttt taattccaaa aaaaaaaaaa aaaaaaa         957
```

<210> 114
<211> 161
<212> PRT
<213> Homo sapien

<400> 114

```
Met Ser Ser Tyr Gln Gln Lys Gln Thr Phe Thr Pro Pro Pro Gln Leu
 1               5                  10                  15
Gln Gln Gln Gln Val Lys Gln Pro Ser Gln Pro Pro Pro Gln Glu Ile
            20                  25                  30
Phe Val Pro Thr Thr Lys Glu Pro Cys His Ser Lys Val Pro Gln Pro
        35                  40                  45
Gly Asn Thr Lys Ile Pro Glu Pro Gly Cys Thr Lys Val Pro Glu Pro
    50                  55                  60
Gly Cys Thr Lys Val Pro Glu Pro Gly Cys Thr Lys Val Pro Glu Pro
65                  70                  75                  80
Gly Cys Thr Lys Val Pro Glu Pro Gly Cys Thr Lys Val Pro Glu Pro
                85                  90                  95
Gly Tyr Thr Lys Val Pro Glu Pro Gly Ser Ile Lys Val Pro Asp Gln
            100                 105                 110
Gly Phe Ile Lys Phe Pro Glu Pro Gly Ala Ile Lys Val Pro Glu Gln
        115                 120                 125
Gly Tyr Thr Lys Val Pro Val Pro Gly Tyr Thr Lys Val Pro Glu Pro
    130                 135                 140
Cys Pro Ser Thr Val Thr Pro Gly Pro Ala Gln Gln Lys Thr Lys Gln
```

145 150 155 160
Lys

<210> 115
<211> 506
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(506)
<223> n = A,T,C or G

<400> 115
cattggtnct ttcatttgct ntggaagtgt nnatctctaa cagtggacaa agttcccngt 60
gccttaaact ctgtnacact tttgggaant gaaaanttng tantatgata ggttattctg 120
angtanagat gttctggata ccattanatn tgcccccngt gtcagaggct catattgtgt 180
tatgtaaatg gtatntcatt cgctactatn antcaattng aaatanggtc tttgggttat 240
gaatantnng cagcncanct nanangctgt ctgtngtatt cattgtggtc atagcaccta 300
acancattgt aacctcnatc nagtgagaca nactagnaan ttcctagtga tggctcanga 360
ttccaaatgg nctcatntcn aatgtttaaa agttanttaa gtgtaagaaa tacagactgg 420
atgttccacc aactagtacc tgtaatgacn ggcctgtccc aacacatctc cctttttcat 480
gactgtggta ncccgcatcg gaaaaa 506

<210> 116
<211> 3079
<212> DNA
<213> Homo sapien

<400> 116
ggatccccgg gtttcctaaa ccccccacag agtcctgccc aggccaaaga gcaaggaaaa 60
ggtcaaaggg cagaaaaaat gctgagttag gaggagctat ggaaggataa acctggcctt 120
aaagaggtca aagtggttta taggggcgc tgagggcttc ccacattctc tggcctaaac 180
cttgcaggca gatctgccca gtgggctctg ggatagctgt gccttcccta acaaaaaaat 240
tgtgcacaaa aggatgaaac tctatttttcc ctctagcaca taaccaagaa tataaggcta 300
cagattgcct ttcccagagg gaaaaccctg cagcaacctg ctgcctggaa aagtgtaaga 360
gcagatcact ggggaatcgt ttgccccccg ctgatggaca gcttccccaa gctccaaggg 420
caggtgctca gcatgtaccg tactgggatg gttgtcaata ctcctggtcc tgtaagagtc 480
ccaggacact gccatgccaa tgcccctca gttcctggca tcctttttgg gctgctcaca 540
gccccagcct ctatggtgaa gacatacttg ctagcagcgt caccaacttg ttgccaagag 600
atcagtgctc gaaggcaagg ttatttctaa ctgagcagag cctgccagga agaaagcgtt 660
tgcaccccac accactgtgc aggtgtgacc ggtgagctca cagctgcccc ccaggcatgc 720
ccagcccact taatcatcac agctcgacag ctctctcgcc cagcccagtt ctggaaggga 780
taaaaagggg catcaccgtt cctgggtaac agagccacct tctgcgtcct gctgagctct 840
gttctctcca gcacctccca acccactagt gcctggttct cttgctccac caggaacaag 900
ccaccatgtc tcgccagtca agtgtgtctt ccggagcggg gggcagtcgt agcttcagca 960
ccgcctctgc catcaccccg tctgtctccc gcaccagctt cacctccgtg tcccggtccg 1020
ggggtggcgg tggtggtggc ttcggcaggg tcagccttgc gggtgcttgt ggagtgggtg 1080
gctatggcag ccggagcctc tacaacctgg ggggctccaa gaggatatcc atcagcacta 1140
gtggtggcag cttcaggaac cggtttggtg ctggtgctgg aggcggctat ggctttggag 1200
gtggtgccgg tagtggattt ggtttcggcg gtggagctgg tggtggcttt gggctcggtg 1260
gcggagctgg ctttggaggt ggcttcggtg gccctggctt tcctgtctgc cctcctggag 1320
gtatccaaga ggtcactgtc aaccagagtc tcctgactcc cctcaaccctg caaatcgacc 1380
ccagcatcca gagggtgagg accgaggagc gcgagcagat caagaccctc aacaataagc 1440

ttgcctcctt catcgacaag gtgcggttcc tggagcagca gaacaaggtt ctggaaacaa 1500
agtggaccct gctgcaggag cagggcacca agactgtgag gcagaacctg gagccgttgt 1560
tcgagcagta catcaacaac ctcaggaggc agctggacag catcgtgggg gaacggggcc 1620
gcctggactc agagctgaga aacatgcagg acctggtgga agacttcaag aacaagtatg 1680
aggatgaaat caacaagcgt accactgctg agaatgagtt tgtgatgctg aagaaggatg 1740
tagatgctgc ctacatgaac aaggtggagc tggaggccaa ggttgatgca ctgatggatg 1800
agattaactt catgaagatg ttctttgatg cggagctgtc ccagatgcag acgcatgtct 1860
ctgacacctc agtggtcctc tccatggaca acaaccgcaa cctggacctg gatagcatca 1920
tcgctgaggt caaggcccag tatgaggaga ttgccaaccg cagccggaca gaagccgagt 1980
cctggtatca gaccaagtat gaggagctgc agcagacagc tggccggcat ggcgatgacc 2040
tccgcaacac caagcatgag atctctgaga tgaaccggat gatccagagg ctgagagccg 2100
agattgacaa tgtcaagaaa cagtgcgcca atctgcagaa cgccattgcg gatgccgagc 2160
agcgtgggga gctggccctc aaggatgcca ggaacaagct ggccgagctg gaggaggccc 2220
tgcagaaggc caagcaggac atggcccggc tgctgcgtga gtaccaggag ctcatgaaca 2280
ccaagctggc cctggacgtg gagatcgcca cttaccgcaa gctgctggag ggcgaggaat 2340
gcagactcag tggagaagga gttggaccag tcaacatctc tgttgtcaca agcagtgttt 2400
cctctggata tggcagtggc agtggctatg gcggtggcct cggtggaggt cttggcggcg 2460
gcctcggtgg aggtcttgcc ggaggtagca gtggaagcta ctactccagc agcagtgggg 2520
gtgtcggcct aggtggtggg ctcagtgtgg ggggctctgg cttcagtgca agcagtagcc 2580
gagggctggg ggtgggcttt ggcagtggcg ggggtagcag ctccagcgtc aaatttgtct 2640
ccaccacctc ctcctcccgg aagagcttca agagctaaga acctgctgca agtcactgcc 2700
ttccaagtgc agcaacccag cccatggaga ttgcctcttc taggcagttg ctcaagccat 2760
gttttatcct tttctggaga gtagtctaga ccaagccaat tgcagaacca cattctttgg 2820
ttcccaggag agccccattc ccagcccctg gtctcccgtg ccgcagtttt atattctgct 2880
tcaaatcagc cttcaggttt cccacagcat ggcccctgct gacacgagaa cccaaagttt 2940
tcccaaatct aaatcatcaa aacagaatcc ccacccccaat cccaaatttt gttctggttc 3000
taactacctc cagaatgtgt tcaataaaat gttttataat ataagctggt gtgcagaatt 3060
gttttttttt tctacccaa 3079

<210> 117
<211> 6921
<212> DNA
<213> Homo sapien

<400> 117
gaattctgac tgtccactca aaacttctat tccgatcaaa gctatctgtg actacagaca 60
aattgagata accatttaca aagacgatga atgtgttttg gcgaataact ctcatcgtgc 120
taaatggaag gtcattagtc ctactgggaa tgaggctatg gtcccatctg tgtgcttcac 180
cgttcctcca ccaaacaaag aagcggtgga ccttgccaac agaattgagc aacagtatca 240
gaatgtcctg actctttggc atgagtctca cataaacatg aagagtgtag tatcctggca 300
ttatctcatc aatgaaattg atagaattcg agctagcaat gtggcttcaa taaagacaat 360
gctacctggt gaacatcagc aagttctaag taatctacaa tctcgttttg aagattttct 420
ggaagatagc caggaatccc aagtcttttc aggctcagat ataacacaac tggaaaagga 480
ggttaatgta tgtaagcagt attatcaaga acttcttaaa tctgcagaaa gagaggagca 540
agaggaatca gtttataatc tctacatctc tgaagttcga aacattagac ttcggttaga 600
gaactgtgaa gatcggctga ttagacagat tcgaactccc ctggaaagag atgatttgca 660
tgaaagtgtg ttcagaatca cagaacagga gaaactaaag aaagagctgg aacgacttaa 720
agatgatttg ggaacaatca caaataagtg tgaggagttt ttcagtcaag cagcagcctc 780
ttcatcagtc cctaccctac gatcagagct taatgtggtc cttcagaaca tgaaccaagt 840
ctatttctatg tcttccactt acatagataa gttgaaaact gttaacttgg tgttaaaaaa 900
cactcaagct gcagaagccc tcgtaaaact ctatgaaact aaactgtgtg aagaagaagc 960
agttatagct gacaagaata atattgagaa tctaataagt actttaaagc aatggagatc 1020
tgaagtagat gaaaagagac aggtattcca tgccttagag gatgagttgc agaaagctaa 1080
agccatcagt gatgaaatgt ttaaaacgta taaagaacgg gaccttgatt ttgactggca 1140
caaagaaaaa gcagatcaat tagttgaaag gtggcaaaat gttcatgtgc agattgacaa 1200

caggttacgg gacttagagg gcattggcaa atcactgaag tactacagag acacttacca 1260
tcctttagat gattggatcc agcaggttga aactactcag agaaagattc aggaaaatca 1320
gcctgaaaat agtaaaaccc tagccacaca gttgaatcaa cagaagatgc tggtgtccga 1380
aatagaaatg aaacagagca aaatggacga gtgtcaaaaa tatgcagaac agtactcagc 1440
tacagtgaag gactatgaat tacaaacaat gacctaccgg gccatggtag attcacaaca 1500
aaaatctcca gtgaaacgcc gaagaatgca gagttcagca gatctcatta ttcaagagtt 1560
catggaccta aggactcgat atactgccct ggtcactctc atgacacaat atattaaatt 1620
tgctggtgat tcattgaaga ggctggaaga ggaggagatt aaaaggtgta aggagacttc 1680
tgaacatggg gcatattcag atctgcttca gcgtcagaag gcaacagtgc ttgagaatag 1740
caaacttaca ggaaagataa gtgagttgga aagaatggta gctgaactaa agaaacaaaa 1800
gtcccgagta gaggaagaac ttccgaaggt cagggaggct gcagaaaatg aattgagaaa 1860
gcagcagaga aatgtagaag atatctcttt gcagaagata agggctgaaa gtgaagccaa 1920
gcagtaccgc agggaacttg aaaccattgt gagagagaag gaagccgctg aaagagaact 1980
ggagcgggtg aggcagctca ccatagaggc cgaggctaaa agagctgccg tggaagagaa 2040
cctcctgaat tttcgcaatc agttggagga aaacaccttt accagacgaa cactggaaga 2100
tcatcttaaa agaaaagatt taagtctcaa tgatttggag caacaaaaaa ataaattaat 2160
ggaagaatta agaagaaaga gagacaatga ggaagaactc ttgaagctga taaagcagat 2220
ggaaaaagac cttgcatttc agaaacaggt agcagagaaa cagttgaaag aaaagcagaa 2280
aattgaattg gaagcaagaa gaaaaataac tgaaattcag tatacatgta gagaaaatgc 2340
attgccagtg tgtccgatca cacaggctac atcatgcagg gcagtaacgg gtctccagca 2400
agaacatgac aagcagaaag cagaagaact caaacagcag gtagatgaac taacagctgc 2460
caatagaaag gctgaacaag acatgagaga gctgacatat gaacttaatg ccctccagct 2520
tgaaaaaacg tcatctgagg aaaaggctcg tttgctaaaa gataaactag atgaaacaaa 2580
taatacactc agatgcctta agttggagct ggaaaggaag gatcaggcgg agaaagggta 2640
ttctcaacaa ctcagagagc ttggtaggca attgaatcaa accacaggta aagctgaaga 2700
agccatgcaa gaagctagtg atctcaagaa aataaagcgc aattatcagt tagaaattaga 2760
atcttcttaat catgaaaaag ggaaactaca aagagaagta gacagaatca caagggcaca 2820
tgctgtagct gagaagaata ttcagcattt aaattcacaa attcattctt ttcgagatga 2880
gaaagaatta gaaagactac aaatctgcca gagaaaatca gatcatctaa aagaacaatt 2940
tgagaaaagc catgagcagt tgcttcaaaa tatcaaagct gaaaaagaaa ataatgataa 3000
aatccaaagg ctcaatgaag aattggagaa aagtaatgag tgtgcagaga tgctaaaaca 3060
aaaagtagag gagcttacta ggcagaataa tgaaaccaaa ttaatgatgc agagaattca 3120
ggcagaatca gagaatatag ttttagagaa acaaactatc cagcaaagat gtgaagcact 3180
gaaaattcag gcagatggtt ttaaagatca gctacgcagc acaaatgaac acttgcataa 3240
acagacaaaa acagagcagg attttcaaag aaaaattaaa tgcctagaag aagacctggc 3300
gaaaagtcaa aatttggtaa gtgaatttaa gcaaaagtgt gaccaacaga acattatcat 3360
ccagaatacc aagaaagaag ttagaaatct gaatgcggaa ctgaatgctt ccaaagaaga 3420
gaagcgacgc ggggagcaga aagttcagct acaacaagct caggtgcaag agttaaataa 3480
caggttgaaa aaagtacaag acgaattaca cttaaagacc atagaggagc agatgaccca 3540
cagaaagatg gtttctgttc aggaagaatc tggtaaattc aaacaatcag cagaggagtt 3600
tcggaagaag atggaaaaat taatggagtc caaagtcatc actgaaaatg atatttcagg 3660
cattaggctt gactttgtgt ctcttcaaca agaaaactct agagcccaag aaaatgctaa 3720
gctttgtgaa acaaacatta aagaacttga aagacagctt caacagtatc gtgaacaaat 3780
gcagcaaggg cagcacatgg aagcaaatca ttaccaaaaa tgtcagaaac ttgaggatga 3840
gctgatagcc cagaagcgtg aggttgaaaa cctgaagcaa aaaatggacc aacagatcaa 3900
agagcatgaa catcaattag ttttgctcca gtgtgaaatt caaaaaaaga gcacagccaa 3960
agactgtacc ttcaaaccag attttgagat gacagtgaag gagtgccagc actctggaga 4020
gctgtcctct agaaacactg gacaccttca cccaacaccc agatccccta tgttgagatg 4080
gactcaagaa ccacagccat tggaagagaa gtggcagcat cgggttgttg aacagatacc 4140
caaagaagtc caattccagc caccaggggc tccactcgag aaagagaaaa gccagcagtg 4200
ttactctgag tacttttctc agacaagcac cgagttacag ataacttttg atgagacaaa 4260
ccccattaca agactgtctg aaattgagaa gataagagac caagccctga acaatttcta 4320
accacctgtt aggtatcaag ataacgcatg tgaaatggaa ctggtgaagg ttttgacacc 4380
cttagagata gctaagaaca agcagtatga tatgcataca gaagtcacaa cattaaaaca 4440
agaaaagaac ccagttccca gtgctgaaga atggatgctt gaagggtgca gagcatctgg 4500

tggactcaag aaaggggatt tccttaagaa gggcttagaa ccagagacct tccagaactt 4560
tgatggtgat catgcatgtt cagtcaggga tgatgaattt aaattccaag ggcttaggca 4620
cactgtgact gccaggcagt tggtggaagc taagcttctg gacatgagaa caattgagca 4680
gctgcgactc ggtcttaaga ctgttgaaga agttcagaaa actcttaaca agtttctgac 4740
gaaagccacc tcaattgcag ggctttacct agaatctaca aaagaaaaga tttcatttgc 4800
ctcagcggcc gagagaatca taatagacaa aatggtggct ttggcatttt tagaagctca 4860
ggctgcaaca ggttttataa ttgatcccat ttcaggtcag acatattctg ttgaagatgc 4920
agttcttaaa ggagttgttg accccgaatt cagaattagg cttcttgagg cagagaaggc 4980
agctgtggga tattcttatt cttctaagac attgtcagtg tttcaagcta tggaaaatag 5040
aatgcttgac agacaaaaag gtaaacatat cttggaagcc cagattgcca gtgggggtgt 5100
cattgaccct gtgagaggca ttcgtgttcc tccagaaatt gctctgcagc aggggttgtt 5160
gaataatgcc atcttacagt ttttacatga gccatccagc aacacaagag tttcccctaa 5220
tcccaataac aagcaagctc tgtattactc agaattactg cgaatgtgtg tatttgatgt 5280
agagtcccaa tgctttctgt ttccatttgg ggagaggaac atttccaatc tcaatgtcaa 5340
gaaaacacat agaatttctg tagtagatac taaaacagga tcagaattga ccgtgtatga 5400
ggctttccag agaaacctga ttgagaaaag tatatatctt gaactttcag ggcagcaata 5460
tcagtggaag gaagctatgt tttttgaatc ctatgggcat tcttctcata tgctgactga 5520
tactaaaaca ggattacact tcaatattaa tgaggctata gagcagggaa caattgacaa 5580
agccttggtc aaaaagtatc aggaaggcct catcacactt acagaacttg ctgatttttt 5640
gctgagccgg ttagtcccca agaaagattt gcacagtcct gttgcagggt attggctgac 5700
tgctagtggg gaaaggatct ctgtactaaa agcctcccgt agaaatttgg ttgatcggat 5760
tactgccctc cgatgccttg aagcccaagt cagtacaggg ggcataattg atcctttac 5820
tggcaaaaag taccgggtgg ccgaagcttt gcatagaggc ctggttgatg aggggtttgc 5880
ccagcagctg cgacagtgtg aattagtaat cacagggatt ggccatccca tcactaacaa 5940
aatgatgtca gtggtggaag ctgtgaatgc aaatattata aataaggaaa tgggaatccg 6000
atgtttggaa tttcagtact tgacaggagg gttgatagag ccacaggttc actctcggtt 6060
atcaatagaa gaggctctcc aagtaggtat tatagatgtc ctcattgcca caaaacttaa 6120
agatcaaaag tcatatgtca gaaatataat atgccctcag acaaaaagaa agttgacata 6180
taaagaagcc ttagaaaaag ctgattttga tttccacaca ggacttaaac tgttagaagt 6240
atctgagccc ctgatgacag gaatttctag cctctactat tcttcctaat gggacatgtt 6300
taaataactg tgcaaggggt gatgcaggct ggttcatgcc actttttcag agtatgatga 6360
tatcggctac atatgcagtc tgtgaattat gtaacatact ctatttcttg agggctgcaa 6420
attgctaagt gctcaaaata gagtaagttt taaattgaaa attacataag atttaatgcc 6480
cttcaaatgg tttcatttag ccttgagaat ggtttttttga aacttggcca cactaaaatg 6540
ttttttttct tttacgtaga atgtgggata aacttgatga actccaagtt cacagtgtca 6600
tttcttcaga actccccttc attgaatagt gatcatttat taaatgataa attgcactcg 6660
ctgaaagagc acgtcatgaa gcaccatgga atcaaagaga aagatataaa ttcgttccca 6720
cagccttcaa gctgcagtgt tttagattgc ttcaaaaaat gaaaaagttt tgccttttc 6780
gatatagtga ccttctttgc atattaaaat gtttaccaca atgtcccatt tctagttaag 6840
tcttcgcact tgaaagctaa cattatgaat attatgtgtt ggaggagggg aaggattttc 6900
ttcattctgt gtattttccg g 6921

<210> 118
<211> 946
<212> DNA
<213> Homo sapien

<400> 118
cttctgactg ggctcaggct gacaggtaga gctcaccatg gcttcttgtg tccttgtccc 60
ctccccatca cagctgtggt gcagtccacc gtctccagtg gctatggcgg tgccagtggt 120
gtcggcagtg gcttaggcct gggtggagga agcagctact cctatggcag tggtcttggc 180
gttggaggtg gcttcagttc cagcagtggc agagccattg ggggtggcct cagcttgtct 240
ggaggcggca gttccaccat caagtacacc accacctcct cctccagcag gaagagctat 300
aagcactaaa gtgcgtctgc tagctctcgg tcccacagtc ctcaggcccc tctctggctg 360
cagagccctc tcctcaggtt gcctgtcctc tcctggcctc cagtctcccc tgctgtccca 420

ggtagagctg gggatgaatg cttagtgccc tcacttcttc tctctctctc tataccatct 480
gagcacccat tgctcaccat cagatcaacc tctgatttta catcatgatg taatcaccac 540
tggagcttca ctgttactaa attattaatt tcttgcctcc agtgttctat ctctgaggct 600
gagcattata agaaaatgac ctctgctcct tttcattgca gaaaattgcc aggggcttat 660
ttcagaacaa ctttccactta ctttccactg gctctcaaac tctctaactt ataagtgttg 720
tgaaccccca cccaggcagt atccatgaaa gcacaagtga ctagtcctat gatgtacaaa 780
gcctgtatct ctgtgatgat ttctgtgctc ttcactgttt gcaattgcta aataaagcag 840
atttataata catatattct tttactttgc cttgctttgg ggccaaagtt ttgggcttaa 900
actttttttat ctgataagtg aatagttgtt tttaaaagat aatcta 946

<210> 119
<211> 8948
<212> DNA
<213> Homo sapien

<400> 119
tcaacagccc ctgctccttg ggcccctcca tgccatgccg taatctctcc cacccgacca 60
acaccaacac ccagctcccga cgcagctcct ctgcgccctt gccgccctcc gagccacagc 120
tttcctcccg ctcctgcccc cggcccgtcg ccgtctccgc gctcgcagcg gcctcgggag 180
ggcccaggta gcgagcagcg acctcgcgag ccttccgcac tcccgcccgg ttcccgggcc 240
gtccgcctat ccttggcccc ctccgctttc tccgcgccgg cccgcctcgc ttatgcctcg 300
gcgctgagcc gctctcccga ttgcccgccg acatgagctg caacggaggc tcccacccgc 360
ggatcaacac tctgggccgc atgatccgcg ccgagtctgg cccggacctg cgctacgagg 420
tgaccagcgg cggcgggggc accagcagga tgtactattc tcggcgcggc gtgatcaccg 480
accagaactc ggacggctac tgtcaaaccg gcacgatgtc caggcaccag aaccagaaca 540
ccatccagga gctgctgcag aactgctccg actgcttgat gcgagcagag ctcatcgtgc 600
agcctgaatt gaagtatgga gatggaatac aactgactcg gagtcgagaa ttggatgagt 660
gttttgccca ggccaatgac caaatggaaa tcctcgacag cttgatcaga gagatgcggc 720
agatgggcca gccctgtgat gcttaccaga aaaggcttct tcagctccaa gagcaaatgc 780
gagcccttta taaagccatc agtgtccctc gagtccgcag ggccagctcc aagggtggtg 840
gaggctacac ttgtcagagt ggctctggct gggatgagtt caccaaacat gtcaccagtg 900
aatgtttggg gtggatgagg cagcaaaggg cggagatgga catggtggcc tggggtgtgg 960
acctggcctc agtggagcag cacattaaca gccaccgggg catccacaac tccatcggcg 1020
actatcgctg gcagctggac aaaatcaaag ccgacctgcg cgagaaatct gcgatctacc 1080
agttggagga ggagtatgaa aacctgctga aagcgtcctt tgagaggatg gatcacctgc 1140
gacagctgca gaacatcatt caggccacgt ccagggagat catgtggatc aatgactgcg 1200
aggaggagga gctgctgtac gactggagcg acaagaacac caacatcgct cagaaacagg 1260
aggccttctc catacgcatg agtcaactgg aagttaaaga aaaagagctc aataagctga 1320
aacaagaaag tgaccaactt gtcctcaatc agcatccagc ttcagacaaa attgaggcct 1380
atatggacac tctgcagacg cagtggagtt ggattcttca gatcaccaag tgcattgatg 1440
ttcatctgaa agaaaatgct gcctactttc agttttttga agaggcgcag tctactgaag 1500
catacctgaa ggggctccag gactccatca ggaagaagta cccctgcgac aagaacatgc 1560
ccctgcagca cctgctggaa cagatcaagg agctggagaa agaacgagag aaaatccttg 1620
aatacaagcg tcaggtgcag aacttggtaa acaagtctaa gaagattgta cagctgaagc 1680
ctcgtaaccc agactacaga agcaataaac ccattattct cagagctctc tgtgactaca 1740
aacaagatca gaaaatcgtg cataaggggg atgagtgtat cctgaaggac aacaacgagc 1800
gcagcaagtg gtacgtgacg ggcccgggag gcgttgacat gcttgttccc tctgtggggc 1860
tgatcatccc tcctccgaac ccactggccg tggacctctc ttgcaagatt gagcagtact 1920
acgaagccat cttggctctg tggaaccagc tctacatcaa catgaagagc ctggtgtcct 1980
ggcactactg catgattgac atagagaaga tcagggccat gacaatcgcc aagctgaaaa 2040
caatgcggca ggaagattac atgaagacga tagccgacct tgagttacat taccaagagt 2100
tcatcagaaa tagccaaggc tcagagatgt ttggagatga tgacaagcgg aaaatacagt 2160
ctcagttcac cgatgcccag aagcattacc agaccctggt cattcagctc cctggctatc 2220
cccagcacca gacagtgacc acaactgaaa tcactcatca tggaacctgc caagatgtca 2280
accataataa agtaattgaa accaacagag aaaatgacaa gcaagaaaca tggatgctga 2340

tggagctgca gaagattcgc aggcagatag agcactgcga gggcaggatg actctcaaaa 2400
acctccctct agcagaccag gggtcttctc accacatcac agtgaaaatt aacgagctta 2460
agagtgtgca gaatgattca caagcaattg ctgaggttct caaccagctt aaagatatgc 2520
ttgccaactt cagaggttct gaaaagtact gctatttaca gaatgaagta tttggactat 2580
ttcagaaact ggaaaatatc aatggtgtta cagatggcta cttaaatagc ttatgcacag 2640
taagggcact gctccaggct attctccaaa cagaagacat gttaaaggtt tatgaagcca 2700
ggctcactga ggaggaaact gtctgcctgg acctggataa agtggaagct taccgctgtg 2760
gactgaagaa aataaaaaat gacttgaact tgaagaagtc gttgttggcc actatgaaga 2820
cagaactaca gaaagcccag cagatccact ctcagacttc acagcagtat ccactttatg 2880
atctggactt gggcaagttc ggtgaaaaag tcacacagct gacagaccgc tggcaaagga 2940
tagataaaca gatcgacttt agattatggg acctggagaa acaaatcaag caattgagga 3000
attatcgtga taactatcag gcttttctgca agtggctcta tgatcgtaaa cgccgccagg 3060
attccttaga atccatgaaa tttggagatt ccaacacagt catgcggttt ttgaatgagc 3120
agaagaactt gcacagtgaa atatctggca aacgagacaa atcagaggaa gtacaaaaaa 3180
ttgctgaact ttgcgccaat tcaattaagg attatgagct ccagctggcc tcatacacct 3240
caggactgga aactctgctg aacatacctа tcaagaggac catgattcag tcccctttctg 3300
gggtgattct gcaagaggct gcagatgttc atgctcggta cattgaacta cttacaagat 3360
ctggagacta ttacaggttc ttaagtgaga tgctgaagag tttggaagat ctgaagctga 3420
aaaataccaa gatcgaagtt ttggaagagg agcttcagact ggcccgagat gccaactcgg 3480
aaaactgtaa taagaacaaa ttcctggatc agaacctgca gaaataccag gcagagtgtt 3540
cccagttcaa agcgaagctt gcgagcctgg aggagctgaa gagacaggct gagctggatg 3600
ggaagtcggc taagcaaaat ctagacaagt gctacggcca aataaaagaa cttcaatgaga 3660
agatcacccg actgacttat gagattgaag atgaaaagag aagaagaaaa tctgtggaag 3720
acagatttga ccaacagaag aatgactatg accaactgca gaaagcaagg caatgtgaaa 3780
aggagaacct tggttggcag aaattagagt ctgagaaagc catcaaggag aaggagtacg 3840
agattgaaag gttgagggtt ctactgcagg aagaaggcac cggaagaga gaatatgaaa 3900
atgagctggc aaaggtaaga aaccactata atgaggagat gagtaattta aggaacaagt 3960
atgaaacaga gattaacatt acgaagacca ccatcaagga gatatccatg caaaaagagg 4020
atgattccaa aaatcttaga aaccagcttg atagactttc aagggaaaat cgagatctga 4080
aggatgaaat tgtcaggctc aatgacagca tcttgcaggc cactgagcag cgaaggcgag 4140
ctgaagaaaa cgcccttcag caaaaggcct gtggctctga gataatgcag aagaagcagc 4200
atctggagat agaactgaag caggtcatgc agcagcgctc tgaggacaat gcccggcaca 4260
agcagtccct ggaggaggct gccaagacca ttcaggacaa aaataaggag atcgagagac 4320
tcaaagctga gtttcaggag gaggccaagc gccgctggga atatgaaaat gaactgagta 4380
aggtaagaaa caattatgat gaggagatca ttagcttaaa aaatcagttt gagaccgaga 4440
tcaacatcac caagaccacc atccaccagc tcaccatgca gaaggaagag gataccagtg 4500
gctaccgggc tcagatagac aatctcaccc gagaaaacag gagcttatct gaagaaataa 4560
agaggctgaa gaacactcta acccagacca cagagaatct caggagggtg gaagaagaca 4620
tccaacagca aaaggccact ggctctgagg tgtctcagag gaaacagcag ctggaggttg 4680
agctgagaca agtcactcag atgcgaacag aggagagcgt aagatataag caatctcttg 4740
atgatgctgc caaaaccatc caggataaaa acaaggagat agaaaggtta aaacaactga 4800
tcgacaaaga aacaaatgac cggaaatgcc tggaagatga aaacgcgaga ttacaaaggg 4860
tccagtatga cctgcagaaa gcaaacagta gtgcgacgga gacaataaac aaactgaagg 4920
ttcaggagca agaactgaca cgcctgagga tcgactatga aagggtttcc caggagagga 4980
ctgtgaagga ccaggatatc acgcggttcc agaactctct gaaagagctg cagctgcaga 5040
agcagaaggt ggaagaggag ctgaatcggc tgaagaggac cgcgtcagaa gactcctgca 5100
agaggaagaa gctggaggaa gagctggaag gcatgaggag gtcgctgaag gagcaagcca 5160
tcaaaatcac caacctgacc cagcagctgg agcaggcatc cattgttaag aagaggagtg 5220
aggatgacct ccggcagcag agggacgtgc tggatggcca cctgagggaa aagcagagga 5280
cccaggaaga gctgaggagg ctctcttctg aggtcgaggc cctgaggcgg cagttactcc 5340
aggaacagga aagtgtcaaa caagctcact tgaggaatga gcatttccag aaggcgatag 5400
aagataaaag cagaagctta aatgaaagca aaatagaaat tgagaggctg cagtctctca 5460
cagagaacct gaccaaggag cacttgatgt tagaagaaga actgcggaac ctgaggctgg 5520
agtacgatga cctgaggaga ggacgaagcg aagcggacag tgataaaaat gcaaccatct 5580
tggaactaag gagccagctg cagatcagca acaaccggac cctggaactg caggggctga 5640

ttaatgattt acagagagag agggaaaatt tgagacagga aattgagaaa ttccaaaagc 5700
aggctttaga ggcatctaat aggattcagg aatcaaagaa tcagtgtact caggtggtac 5760
aggaaagaga gagccttctg gtgaaaatca aagtcctgga gcaagacaag gcaaggctgc 5820
agaggctgga ggatgagctg aatcgtgcaa aatcaactct agaggcagaa accagggtga 5880
aacagcgcct ggagtgtgag aaacagcaaa ttcagaatga cctgaatcag tggaagactc 5940
aatattcccg caaggaggag gctattagga agatagaatc ggaaagagaa aagagtgaga 6000
gagagaagaa cagtcttagg agtgagatcg aaagactcca agcagagatc aagagaattg 6060
aagagaggtg caggcgtaag ctggaggatt ctaccaggga gacacagtca cagttagaaa 6120
cagaacgctc ccgatatcag agggagattg ataaactcag acagcgccca tatgggtccc 6180
atcgagagac ccagactgag tgtgagtgga ccgttgacac ctccaagctg gtgtttgatg 6240
ggctgaggaa gaaggtgaca gcaatgcagc tctatgagtg tcagctgatc gacaaaacaa 6300
ccttggacaa actattgaag gggaagaagt cagtggaaga agttgcttct gaaatccagc 6360
cattccttcg gggtgcagga tctatcgctg gagcatctgc ttctcctaag gaaaaatact 6420
ctttggtaga ggccaagaga aagaaattaa tcagcccaga atccacagtc atgcttctgg 6480
aggcccaggc agctacaggt ggtataattg atccccatcg gaatgagaag ctgactgtcg 6540
acagtgccat agctcgggac ctcattgact tcgatgaccg tcagcagata tatgcagcag 6600
aaaaagctat cactggtttt gatgatccat tttcaggcaa gacagtatct gttttcagaag 6660
ccatcaagaa aaatttgatt gatagagaaa ccggaatgcg cctgctggaa gcccagattg 6720
cttcaggggg tgtagtagac cctgtgaaca gtgtcttttt gccaaaagat gtcgccttgg 6780
cccgggggct gattgataga gatttgtatc gatccctgaa tgatccccga gatagtcaga 6840
aaaactttgt ggatccagtc accaaaaaga aggtcagtta cgtgcagctg aaggaacggt 6900
gcagaatcga accacatact ggtctgctct tgctttcagt acagaagaga agcatgtcct 6960
tccaaggaat cagacaacct gtgaccgtca ctgagctagt agatttctggt atattgagac 7020
cgtccactgt caatgaactg gaatctggtc agatttctta tgacgaggtt ggtgagagaa 7080
ttaaggactt cctccagggt tcaagctgca tagcaggcat atacaatgag accacaaaac 7140
agaagcttgg catttatgag gccatgaaaa ttggcttagt ccgacctggt actgctctgg 7200
agttgctgga agcccaagca gctactggct ttatagtgga tcctgttagc aacttgaggt 7260
taccagtgga ggaagcctac aagagaggtc tggtgggcat tgagttcaaa gagaagctcc 7320
tgtctgcaga acgagctgtc actgggtata atgatcctga aacaggaaac atcatcttt 7380
tgttccaagc catgaataag gaactcatcg aaaagggcca cggtattcgc ttattagaag 7440
cacagatcgc aaccgggggg atcattgacc caaaggagag ccatcgttta ccagttgaca 7500
tagcatataa gaggggctat ttcaatgagg aactcagtga gattctctca gatccaagtg 7560
atgataccaa aggatttttt gaccccaaca ctgaagaaaa tcttacctat ctgcaactaa 7620
aagaaagatg cattaaggat gaggaaacag ggctctgtct tctgcctctg aaagaaaaga 7680
agaaacaggt gcagacatca caaaagaata ccctcaggaa gcgtagagtg gtcatagttg 7740
acccagaaac caataaagaa atgtctgttc aggaggccta caagaagggc ctaattgatt 7800
atgaaacctt caaagaactg tgtgagcagg aatgtgaatg ggaagaaata accatcacgg 7860
gatcagatgg ctccaccagg gtggtcctgg tagatagaaa gacaggcagt cagtatgata 7920
ttcaagatgc tattgacaag ggccttgttg acaggaagtt ctttgatcag taccgatccg 7980
gcagcctcag cctcactcaa tttgctgaca tgatctcctt gaaaaatggt gtcggcacca 8040
gcagcagcat gggcagtggt gtcagcgatg atgtttttag cagctcccga catgaatcag 8100
taagtaagat ttccaccata tccagcgtca ggaatttaac cataaggagc agctcttttt 8160
cagacaccct ggaagaatcg agccccattg cagccatctt tgacacagaa aacctggaga 8220
aaatctccat tacagaaggt atagagcggg gcatcgttga cagcatcacg ggtcagaggc 8280
ttctggaggc tcaggcctgc acaggtggca tcatccaccc aaccacgggc cagaagctgt 8340
cacttcagga cgcagtctcc cagggtgtga ttgaccaaga catggccacc agcgtgaagc 8400
ctgctcagaa agccttcata ggcttcgagg gtgtgaaggg aaagaagaag atgtcagcag 8460
cagaggcagt gaaagaaaaa tggctcccgt atgaggctgg ccagcgcttc ctggagttcc 8520
agtacctcac gggaggtctt gttgacccgg aagtgcatgg gaggataagc accgaagaag 8580
ccatccggaa ggggttcata gatggccgcg ccgcacagag gctgcaagac accagcagct 8640
atgccaaaat cctgacctgc cccaaaacca aattaaaaat atcctataag gatgccataa 8700
atcgctccat ggtagaagat atcactgggc tgcgccttct ggaagccgcc tccgtgtcgt 8760
ccaagggctt acccagcccc tacaacatgt cttcggctcc ggggtcccgc tccggctccc 8820
gctcgggatc tcgctccgga tctcgctccg ggtcccgcag tgggtcccgg agaggaagct 8880
ttgacgccac agggaatttct tcctacttct attcctactc atttagcagt agttctattg 8940

ggcactag 8948

<210> 120
<211> 587
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(587)
<223> n = A,T,C or G

<400> 120
cgtcctaagc acttagacta catcagggaa gaacacagac cacatccctg tcctcatgcg 60
gcttatgttt tctggaagaa agtggagacc nagtccttgg ctttagggct ccccggctgg 120
gggctgtgca ntccggtcag ggcgggaagg gaaatgcacc gctgcatgtg aacttacagc 180
ccaggcggat gccccttccc ttagcactac ctggcctcct gcatcccctc gcctcatgtt 240
cctcccacct tcaaanaatg aanaacccca tgggcccagc cccttgcccc ggggaaccaa 300
ggcagccttc caaaactcag gggctgaagc anactattag ggcaggggct gactttgggt 360
gacactgccc attccctctc agggcagctc angtcacccn ggnctcttga acccagcctg 420
ttcctttgaa aaagggcaaa actgaaaagg gcttttccta naaaaagaaa aaccagggaa 480
ctttgccagg gcttcnntnt taccaaaacn ncttctcnng gatttttaat tccccattng 540
gcctccactt accnggggcn atgccccaaa attaanaatt tcccatc 587

<210> 121
<211> 619
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(619)
<223> n = A,T,C or G

<400> 121
cactagtagg atagaaacac tgtgtcccga gagtaaggag agaagctact attgattaga 60
gcctaaccca ggttaactgc aagaagaggc gggatacttt cagctttcca tgtaactgta 120
tgcataaagc caatgtagtc cagtttctaa gatcatgttc caagctaact gaatcccact 180
tcaatacaca ctcatgaact cctgatggaa caataacagg cccaagcctg tggtatgatg 240
tgcacacttg ctagactcan aaaaaatact actctcataa atgggtggga gtattttggt 300
gacaacctac tttgcttggc tgagtgaagg aatgatattc atatattcat ttattccatg 360
gacatttagt tagtgctttt tatataccag gcatgatgct gagtgacact cttgtgtata 420
tttccaaatt tttgtacagt cgctgcacat atttgaaatc atatattaag acttccaaaa 480
aatgaagtcc ctggtttttc atggcaactt gatcagtaaa ggattcncct ctgtttggta 540
cttaaaacat ctactatatn gttnanatga aattcctttt ccccncctcc cgaaaaaana 600
aagtggtggg gaaaaaaaa 619

<210> 122
<211> 1475
<212> DNA
<213> Homo sapien

<400> 122
tccacctgtc cccgcagcgc cggctcgcgc cctcctgccg cagccaccga gccgccgtct 60
agcgccccga cctcgccacc atgagagccc tgctggcgcg cctgctttct tgcgtcctgg 120

tcgtgagcga ctccaaaggc agcaatgaac ttcatcaagt tccatcgaac tgtgactgtc 180
taaatggagg aacatgtgtg tccaacaagt acttctccaa cattcactgg tgcaactgcc 240
caaagaaatt cggagggcag cactgtgaaa tagataagtc aaaaacctgc tatgagggga 300
atggtcactt ttaccgagga aaggccagca ctgacaccat gggccggccc tgcctgccct 360
ggaactctgc cactgtcctt cagcaaacgt accatgccca cagatctgat gctcttcagc 420
tgggcctggg gaaacataat tactgcagga acccagacaa ccggaggcga ccctggtgct 480
atgtgcaggt gggcctaaag ccgcttgtcc aagagtgcat ggtgcatgac tgcgcagatg 540
gaaaaaagcc ctcctctcct ccagaagaat taaaatttca gtgtggccaa aagactctga 600
ggccccgctt taagattatt gggggagaat tcaccaccat cgagaaccag ccctggtttg 660
cggccatcta caggaggcac cgggggggct ctgtcaccta cgtgtgtgga ggcagcctca 720
tcagcccttg ctgggtgatc agcgccacac actgcttcat tgattaccca aagaaggagg 780
actacatcgt ctacctgggt cgctcaaggc ttaactccaa cacgcaaggg gagatgaagt 840
ttgaggtgga aaacctcatc ctacacaagg actacagcgc tgacacgctt gctcaccaca 900
acgacattgc cttgctgaag atccgttcca aggagggcag gtgtgcgcag ccatcccgga 960
ctatacagac catctgcctg ccctcgatgt ataacgatcc ccagtttggc acaagctgtg 1020
agatcactgg ctttggaaaa gagaattcta ccgactatct ctatccggag cagctgaaga 1080
tgactgttgt gaagctgatt tcccaccggg agtgtcagca gccccactac tacggctctg 1140
aagtcaccac caaaatgctg tgtgctgctg acccacagtg gaaaacagat tcctgccagg 1200
gagactcagg gggacccctc gtctgttccc tccaaggccg catgactttg actggaattg 1260
tgagctgggg ccgtggatgt gccctgaagg acaagccagg cgtctacacg agagtctcac 1320
acttcttacc ctggatccgc agtcacacca aggaagagaa tggcctggcc ctctgagggt 1380
ccccagggag gaaacgggca ccacccgctt tcttgctggt tgtcattttt gcagtagagt 1440
catctccatc agctgtaaga agagactggg aagat 1475

<210> 123
<211> 2294
<212> DNA
<213> Homo sapien

<400> 123
cagcgccggc tcgcgccctc ctgccgcagc caccgagccg ccgtctagcg ccccgacctc 60
gccaccatga gagccctgct ggcgcgcctg cttctctgcg tcctggtcgt gagcgactcc 120
aaaggcagca atgaacttca tcaagttcca tcgaactgtg actgtctaaa tggaggaaca 180
tgtgtgtcca acaagtactt ctccaacatt cactggtgca actgcccaaa gaaattcgga 240
gggcagcact gtgaaataga taagtcaaaa acctgctatg aggggaatgg tcacttttac 300
cgaggaaagg ccagcactga caccatgggc cggccctgcc tgccctggaa ctctgccact 360
gtccttcagc aaacgtacca tgcccacaga tctgatgctc ttcagctggg cctggggaaa 420
cataattact gcaggaaccc agacaaccgg aggcgaccct ggtgctatgt gcaggtgggc 480
ctaaagccgc ttgtccaaga gtgcatggtg catgactgcg cagatggaaa aaagccctcc 540
tctcctccag aagaattaaa atttcagtgt ggccaaaaga ctctgaggcc ccgctttaag 600
attattgggg gagaattcac caccatcgag aaccagccct ggtttgcggc catctacagg 660
aggcaccggg ggggctctgt cacctacgtg tgtggaggca gcctcatcag cccttgctgg 720
gtgatcagcg ccacacactg cttcattgat tacccaaaga aggaggacta catcgtctac 780
ctgggtcgct caaggcttaa ctccaacacg caaggggaga tgaagtttga ggtggaaaac 840
ctaatcctac acaaggacta cagcgctgac acgcttgctc accacaacga cattgccttg 900
ctgaagatcc gttccaagga gggcaggtgt gcgcagccat cccggactat acagaccatc 960
tgcctgccct cgatgtataa cgatccccag tttggcacaa gctgtgagat cactggcttt 1020
ggaaaagaga attctaccga ctatctctat ccggagcagc tgaaaatgac tgttgtgaag 1080
ctgatttccc accgggagtg tcagcagccc cactactacg gctctgaagt caccaccaaa 1140
atgctgtgtg ctgctgaccc acagtggaaa acagattcct gccagggaga ctcaggggga 1200
cccctcgtct gttccctcca aggccgcatg actttgactg gaattgtgag ctggggccgt 1260
ggatgtgccc tgaaggacaa gccaggcgtc tacacgagag tctcacactt cttaccctgg 1320
atccgcagtc acaccaagga agagaatggc ctggccctct gagggtcccc agggaggaaa 1380
cgggcaccac ccgctttctt gctggttgct attttgcagt agagtcatct ccatcagctg 1440
taagaagagc tgggaatata ggctctgcac agatggattt gcctgtgcca ccaccagggc 1500

gaacgacaat agctttaccc tcaggcatag gcctgggtgc tggctgccca gacccctctg 1560
gccaggatgg aggggtggtc ctgactcaac atgttactga ccagcaactt gtctttttct 1620
ggactgaagc ctgcaggagt taaaaagggc agggcatctc ctgtgcatgg gctcgaaggg 1680
agagccagct cccccgaccg gtgggcattt gtgaggccca tggttgagaa atgaataatt 1740
tcccaattag gaagtgtaag cagctgaggt ctcttgaggg agcttagcca atgtgggagc 1800
agcggtttgg ggagcagaga cactaacgac ttcagggcag ggctctgata ttccatgaat 1860
gtatcaggaa atatatatgt gtgtgtatgt ttgcacactt gtgtgtgggc tgtgagtgta 1920
agtgtgagta agagctggtg tctgattgtt aagtctaaat atttccttaa actgtgtgga 1980
ctgtgatgcc acacagagtg gtctttctgg agaggttata ggtcactcct ggggcctctt 2040
gggtccccca cgtgacagtg cctgggaatg tattattctg cagcatgacc tgtgaccagc 2100
actgtctcag tttcactttc acatagatgt ccctttcttg gccagttatc ccttcctttt 2160
agcctagttc atccaatcct cactgggtgg ggtgaggacc actcctgtac actgaatatt 2220
tatatttcac tatttttatt tatatttttg taattttaaa taaaagtgat caataaaatg 2280
tgatttttct gatg 2294

<210> 124
<211> 956
<212> DNA
<213> Homo sapien

<400> 124
gatgagttcc gcaccaagtt tgagacagac caggccctgc gcctgagtgt ggaggccgac 60
atcaatggcc tgcgcagggt gctggatgag ctgaccctgg ccagagccga cctggagatg 120
cagattgaga acctcaagga ggagctggcc tacctgaaga agaaccacga ggaggagatg 180
aacgccctgc gaggccaggt gggtggtgag atcaatgtgg agatggacgc tgccccaggc 240
gtggacctga gccgcatcct caacgagatg cgtgaccagt atgagaagat ggcagagaag 300
aaccgcaagg atgccgagga ttggttcttc agcaagacag aggaactgaa ccgcgaggtg 360
gccaccaaca gtgagctggt gcagagtggc aagagtgaga tctcggagct ccggcgcatc 420
atgcaggcct tggagataga gctgcagtcc cagctcagca tgaaagcatc cctggagggc 480
aacctggcgg agacagagaa ccgctactgc gtgcagctgt cccagatcca ggggctgatt 540
ggcagcgtgg aggagcagct ggcccagctt cgctgcgaga tggagcagca gaaccaggaa 600
tacaaaatcc tgctggatgt gaagacgcgg ctgggagcag agattgccac ctaccgccgc 660
ctgctggagg gagaggatgc ccacctgact cagtacaaga aagaaccggt gaccacccgt 720
caggtgcgta ccattgtgga agaggtccag gatggcaagg tcatctcctc ccgcgagcag 780
gtccaccaga ccacccgctg aggactcagc taccccggcc ggccacccag gaggcaggga 840
cgcagccgcc ccatctgccc cacagtctcc ggcctctcca gcctcagccc cctgcttcag 900
tcccttcccc atgcttcctt gcctgatgac aataaaagct tgttgactca gctatg 956

<210> 125
<211> 486
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(486)
<223> n = A,T,C or G

<400> 125
aaattatata tagtgnttca gctcccattg tggtgttcat agtcttctag gaacagataa 60
acttaagtat tcaattcact cttggcattt tttctttaat ataggctttt tagcctattt 120
ttggaaaact gcttttcttc tgagaacctt attctgaatg tcatcaactt taccaaacct 180
tctaagtcca gagctaactt agtactgttt aagttactat tgactgaatt ttcttcattt 240
tctgtttagc cagtgttacc aaggtaagct ggggaatgaa gtataccaac ttctttcaga 300
gcattttagg acattatggc agctttagaa ggctgtcttg tttctagcca agggagagcc 360

agcgcaggtt ttggatacta gagaaagtca tttgcttgta ctattgccat tttagaaagc 420
tctgatgtga attcaaattt tacctctgtt acttaaagcc aacaatttta aggcagtagt 480
tttact 486

<210> 126
<211> 3552
<212> DNA
<213> Homo sapien

<400> 126
cggcaggcag gtctcgtctc ggcaccctcc cggcgcccgc gttctcctgg ccctgccccg 60
catcccgatg gccgccgctg ggccccggcg ctccgtgcgc ggagccgtct gcctgcatct 120
gctgctgacc ctcgtgatct tcagtcgtgc tggtgaagcc tgcaaaaagg tgatacttaa 180
tgtaccttct aaactagagg cagacaaaat aattggcaga gttaatttgg aagagtgctt 240
caggtctgca gacctcatcc ggtcaagtga tcctgatttc agagttctaa atgatgggtc 300
agtgtacaca gccagggctg ttgcgctgtc tgataagaaa agatcattta ccatatggct 360
ttctgacaaa aggaaacaga cacagaaaga ggttactgtg ctgctagaac atcagaagaa 420
ggtatcgaag acaagacaca ctagagaaac tgttctcagg cgtgccaaga ggagatgggc 480
acctattcct tgctctatgc aagagaattc cttgggccct ttcccattgt ttcttcaaca 540
agttgaatct gatgcagcac agaactatac tgtcttctac tcaataagtg gacgtggagt 600
tgataaagaa cctttaaatt tgttttatat agaaagagac actggaaatc tattttgcac 660
tcggcctgtg gatcgtgaag aatatgatgt ttttgatttg attgcttatg cgtcaactgc 720
agatggatat tcagcagatc tgcccctccc actacccatc agggtagagg atgaaaatga 780
caaccaccct gttttcacag aagcaattta taattttgaa gttttggaaa gtagtagacc 840
tggtactaca gtgggggtgg tttgtgccac agacagagat gaaccggaca caatgcatac 900
gcgcctgaaa tacagcattt tgcagcagac accaaggtca cctgggcttt tttctgtgca 960
tcccagcaca ggcgtaatca ccacagtctc tcattatttg gacagagagg ttgtagacaa 1020
gtacttcattg ataatgaaag tacaagacat ggatggccag ttttttggat tgataggcac 1080
atcaacttgt atcataacag taacagattc aaatgataat gcacccactt tcagacaaaa 1140
tgcttatgaa gcatttgtag aggaaaatgc attcaatgtg gaaatcttac gaatacctat 1200
agaagataag gatttaatta acactgccaa ttggagagtc aattttacca ttttaaaggg 1260
aaatgaaaat ggacatttca aaatcagcac agacaaagaa actaatgaag gtgttctttc 1320
tgttgtaaag ccactgaatt atgaagaaaa ccgtcaagtg aacctggaaa ttggagtaaa 1380
caatgaagcg ccatttgcta gagatattcc cagagtgaca gccttgaaca gagccttggt 1440
tacagttcat gtgagggatc tggatgaggg gcctgaatgc actcctgcag cccaatatgt 1500
gcggattaaa gaaaacttag cagtggggtc aaagatcaac ggctataagg catatgaccc 1560
cgaaaataga aatggcaatg gtttaaggta caaaaaattg catgatccta aaggttggat 1620
caccattgat gaaatttcag ggtcaatcat aacttccaaa atcctggata gggaggttga 1680
aactcccaaa aatgagttgt ataatattac agtcctggca atagacaaag atgatagatc 1740
atgtactgga acacttgctg tgaacattga agatgtaaat gataatccac cagaaatact 1800
tcaagaatat gtagtcattt gcaaaccaaa aatggggtat accgacattt tagctgttga 1860
tcctgatgaa cctgtccatg gagctccatt ttatttcagt ttgcccaata cttctccaga 1920
aatcagtaga ctgtggagcc tcaccaaagt taatgataca gctgcccgtc tttcatatca 1980
gaaaaatgct ggatttcaag aatataccat tcctattact gtaaaagaca gggccggcca 2040
agctgcaaca aaattattga gagttaatct gtgtgaatgt actcatccaa ctcagtgtcg 2100
tgcgacttca aggagtacag gagtaatact tggaaaatgg gcaatccttg caatattact 2160
gggtatagca ctgctctttt ctgtattgct aactttagta tgtggagttt ttggtgcaac 2220
taaagggaaa cgttttcctg aagatttagc acagcaaaac ttaattatat caaacacaga 2280
agcacctgga gacgatagag tgtgctctgc caatggattt atgacccaaa ctaccaacaa 2340
ctctagccaa ggtttttgtg gtactatggg atcaggaatg aaaaatggag ggcaggaaac 2400
cattgaaatg atgaaaggag gaaaccagac cttggaatcc tgccgggggg ctgggcatca 2460
tcatacccctg gactcctgca ggggaggaca cacggaggtg gacaactgca gatacactta 2520
ctcggagtgg cacagtttta ctcaaccccg tctcggtgaa aaattgcatc gatgtaatca 2580
gaatgaagac cgcatgccat cccaagatta tgtcctcact tataactatg agggaagagg 2640
atctccagct ggttctgtgg gctgctgcag tgaaaagcag gaagaagatg gccttgactt 2700

tttaaataat ttggaaccca aatttattac attagcagaa gcatgcacaa agagataatg 2760
tcacagtgct acaattaggt ctttgtcaga cattctggag gtttccaaaa ataatattgt 2820
aaagttcaat ttcaacatgt atgtatatga tgatttttt ctcaattttg aattatgcta 2880
ctcaccaatt tatattttta aagcaagttg ttgcttatct tttccaaaaa gtgaaaaatg 2940
ttaaaacaga caactggtaa atctcaaact ccagcactgg aattaaggtc tctaaagcat 3000
ctgctctttt ttttttttac agatatttta gtaataaata tgctggataa atattagtcc 3060
aacaatagct aagttatgct aatatcacat tattatgtat tcactttaag tgatagttta 3120
aaaaataaac aagaaatatt gagtatcact atgtgaagaa agttttggaa aagaaacaat 3180
gaagactgaa ttaaattaaa aatgttgcag ctcataaaga attggactca cccctactgc 3240
actaccaaat tcatttgact ttggaggcaa aatgtgttga agtgccctat gaagtagcaa 3300
ttttctatag gaatatagtt ggaaataaat gtgtgtgtgt atattattat taatcaatgc 3360
aatatttaaa tgaaatgaga acaaagagga aaatggtaaa aacttgaaat gaggctgggg 3420
tatagtttgt cctacaatag aaaaaagaga gagcttccta ggcctgggct cttaaatgct 3480
gcattataac tgagtctatg aggaaatagt tcctgtccaa tttgtgtaat ttgtttaaaa 3540
ttgtaaataa at 3552

<210> 127
<211> 754
<212> DNA
<213> Homo sapien

<400> 127
tttttttttt ttgtcattgt tcattgattt taatgagaaa gctaagagag gaaataagta 60
gcctttcaaa ggtcacacag aagtaagtga cagatccagg attcatatcc aagcattctg 120
gctctagtgt ccatgcttct caaccattat gacccaatat tcaaccaaat caatactgaa 180
ggacacgtga aatgtatccg gtatttttact attacaaaca aaaatccaat gaacattctt 240
gaagacatac acaaaaataa tggttacaat agaagttact ggaattgaaa ttttggttca 300
acctatatta aaatgtaagg cttttgatat agctaataga tttttgaaat gatcagtctt 360
aacgtttgta ggggagcaca ctcctgcatg gggaaaagat tcactgtgaa gcacagagca 420
cctttatggt tggatcatct tgtcattaaa gttcaggcgt tatctatcct gtaagtggca 480
gaatcaagac tgcaatatcg cctgcttttc tttttaactc atgttttccc ttgactacac 540
tggtcctcaa agtaaaaccc ctgtgtcagt gtactattca tggaatactc tgcaattata 600
accaccttct aatactttta atacccaatc aaaatttatt atacatatgt atcatagata 660
ctcatctgta aagctgtgct tcaaaatagt gatctcttcc caacattaca atatatatta 720
atgatgtcga acctgcccgg gcggccgctc gaag 754

<210> 128
<211> 374
<212> DNA
<213> Homo sapien

<400> 128
aggttttgat taaaaaggca aatgatttta ttgttcgata atcttttaaa aaaataagag 60
gaaggagtaa aattaaagat gaaagatgat ttttatttcc ttgtgacctc tatatccccc 120
ttcccctgcc cttggtaagt aactcttgat ggagaaagga ttaaagactc ttatttaacc 180
aaaaaacaga gccagctaat catttccaaa ggttagtatc tccctgctga cctcttcttt 240
ggtttaattg aataaaacta tatgttcata tatgtattaa aacaactcag aataacatct 300
tttcttcctt agttaaggca ttataagggc tatactatca tccataataa ccaaggcaat 360
aacttaaaaa gctg 374

<210> 129
<211> 546
<212> DNA
<213> Homo sapien

<400> 129
agtgtgatgg atatctgcag aattcgggct aagcgtggtc gcggcccgag gtctggaact 60
tcccagcacy tgaaaaggag cctcctgagc tgactcggct aaagccccac tttcgctcct 120
cctcatttct gccactgat ttccttggag cattcatctg aatattaccg tttgctgtgt 180
aacctggtac atacatagca tgactccctg gaatagagtg ggctggggtg cttatgctgg 240
gagagtgatt gacatgcact ttcaagctat atctaccatt tgcagcaaag gagaaaaaat 300
acctcgagta aattccatca ttttttataa catcagcacc tgctccatca tcaaggagtc 360
tcagcgtaac aggatctcca gtctctggct caactgtggc agtgacagtg gcattaagaa 420
tgggataaaa tcccctgttc acattggcat aaatcatcac aggatgagga aaatggaggc 480
tgtctctttc cacaaaggct tccacagtgg ctgggggcac agacctgccc gggcggccgc 540
tcgaaa 546

<210> 130
<211> 5156
<212> DNA
<213> Homo sapien

<400> 130
accaaccgag gcgccgggca gcgacccctg cagcggagac agagactgag cggcccggca 60
ccgccatgcc tgcgctctgg ctgggctgct gcctctgctt gtcgctcctc ctgcccgcag 120
cccgggccac ctccaggagg gaagtctgtg attgcaatgg gaagtccagg cagtgtatct 180
ttgatcggga actttacaga caaactggta atggattccg ctgcctcaac tgcaatgaca 240
acactgatgg catttactgc gagaagtgca agaatggctt ttaccggcac agagaaaggg 300
accgctgttt gccctgcaat tgtaactcca aaggttctct tagtgctcga tgtgacaact 360
ccggacggtg cagttgtaaa ccaggtgtga caggagccag atgcgaccga tgtctgccag 420
gcttccacat gctcacggat gcggggtgca cccaagacca gagactgcta gactccaagt 480
gtgactgtga cccagctggc atcgcagggc cctgtgacgc gggccgctgt gtctgcaagc 540
cagctgtcac tggagaacgc tgtgataggt gtcgatcagg ttactataat ctggatgggg 600
ggaaccctga gggctgtacc cagtgtttct gctatgggca ttcagccagc tgccgcagct 660
ctgcagaata cagtgtccat aagatcacct ctacctttca tcaagatgtt gatggctgga 720
aggctgtcca acgaaatggg tctcctgcaa agctccaatg gtcacagcgc catcaagatg 780
tgtttagctc agcccaacga ctagaccctg tctattttgt ggctcctgcc aaatttcttg 840
ggaatcaaca ggtgagctat ggtcaaagcc tgtcctttga ctaccgtgtg gacagaggag 900
gcagacaccc atctgcccat gatgtgattc tggaaggtgc tggtctacgg atcacagctc 960
ccttgatgcc acttggcaag acactgcctt gtgggctcac caagacttac acattcaggt 1020
taaatgagca tccaagcaat aattggagcc cccagctgag ttactttgag tatcgaaggt 1080
tactgcggaa tctcacagcc ctccgcatcc gagctacata tggagaatac agtactgggt 1140
acattgacaa tgtgaccctg atttcagccc gccctgtctc tggagcccca gcaccctggg 1200
ttgaacagtg tatatgtcct gttgggtaca aggggcaatt ctgccaggat tgtgcttctg 1260
gctacaagag agattcagcg agactggggc cttttggcac ctgtattcct tgtaactgtc 1320
aagggggagg ggccctgtgat ccagacacag gagattgtta ttcaggggat gagaatcctg 1380
acattgagtg tgctgactgc ccaattggtt tctacaacga tccgcacgac ccccgcagct 1440
gcaagccatg tccctgtcat aacgggttca gctgctcagt gatgccggag acggaggagg 1500
tggtgtgcaa taactgcccc cccggggtca ccggtgcccg ctgtgagctc tgtgctgatg 1560
gctactttgg ggaccccttt ggtgaacatg gcccagtgag gccttgtcag ccctgtcaat 1620
gcaacaacaa tgtggacccc agtgcctctg ggaattgtga ccggctgaca ggcaggtgtt 1680
tgaagtgtat ccacaacaca gccggcatct actgcgacca gtgcaaagca ggctacttcg 1740
gggacccatt ggctcccaac ccagcagaca agtgtcgagc ttgcaactgt aaccccatgg 1800
gctcagagcc tgtaggatgt cgaagtgatg gcacctgtgt ttgcaagcca ggatttggtg 1860
gccccaactg tgagcatgga gcattcagct gtccagcttg ctataatcaa gtgaagattc 1920
agatggatca gtttatgcag cagcttcaga gaatggaggc cctgatttca aaggctcagg 1980
gtggtgatgg agtagtacct gatacagagc tggaaggcag gatgcagcag gctgagcagg 2040
ccctccagga catttctgaga gatgcccaga tttcagaagg tgctagcaga tccttggtc 2100
tccagttggc caaggtgagg agccaagaga acagctacca gagccgcctg gatgacttca 2160
agatgactgt ggaaagagtt cgggctctgg gaagtcagta ccagaaccga gttcgggata 2220

```
ctcacaggct catcactcag atgcagctga gcctggcaga aagtgaagct tccttgggaa    2280
acactaacat tcctgcctca gaccactacg tggggccaaa tggctttaaa agtctggctc    2340
aggaggccac aagattagca gaaagccacg ttgagtcagc cagtaacatg gagcaactga    2400
caagggaaac tgaggactat tccaaacaag ccctctcact ggtgcgcaag gccctgcatg    2460
aaggagtcgg aagcggaagc ggtagcccgg acggtgctgt ggtgcaaggg cttgtggaaa    2520
aattggagaa aaccaagtcc ctggcccagc agttgacaag ggaggccact caagcggaaa    2580
ttgaagcaga taggtcttat cagcacagtc tccgcctcct ggattcagtg tctcggcttc    2640
agggagtcag tgatcagtcc tttcaggtgg aagaagcaaa gaggatcaaa caaaaagcgg    2700
attcactctc aagcctggta accaggcata tggatgagtt caagcgtaca cagaagaatc    2760
tgggaaactg gaaagaagaa gcacagcagc tcttacagaa tggaaaaagt gggagagaga    2820
aatcagatca gctgctttcc cgtgccaatc ttgctaaaag cagagcacaa gaagcactga    2880
gtatgggcaa tgccactttt tatgaagttg agagcatcct taaaaacctc agagagtttg    2940
acctgcaggt ggacaacaga aaagcagaag ctgaagaagc catgaagaga ctctcctaca    3000
tcagccagaa ggtttcagat gccagtgaca agacccagca agcagaaaga gccctgggga    3060
gcgctgctgc tgatgcacag agggcaaaga atggggccgg ggaggccctg gaaatctcca    3120
gtgagattga acaggagatt gggagtctga acttggaagc caatgtgaca gcagatggag    3180
ccttggccat ggaaaaggga ctggcctctc tgaagagtga gatgagggaa gtggaaggag    3240
agctggaaag gaaggagctg gagtttgaca cgaatatgga tgcagtacag atggtgatta    3300
cagaagccca gaaggttgat accagagcca agaacgctgg ggttacaatc caagacacac    3360
tcaacacatt agacggcctc ctgcatctga tggaccagcc tctcagtgta gatgaagagg    3420
ggctggtctt actggagcag aagctttccc gagccaagac ccagatcaac agccaactgc    3480
ggcccatgat gtcagagctg gaagagaggg cacgtcagca gaggggccac ctccatttgc    3540
tggagacaag catagatggg attctggctg atgtgaagaa cttggagaac attagggaca    3600
acctgccccc aggctgctac aatacccagg ctcttgagca acagtgaagc tgccataaat    3660
atttctcaac tgaggttctt gggatacaga tctcagggct cgggagccat gtcatgtgag    3720
tgggtgggat ggggacattt gaacatgttt aatgggtatg ctcaggtcaa ctgacctgac    3780
cccattcctg atcccatggc caggtggttg tcttattgca ccatactcct tgcttcctga    3840
tgctgggcaa tgaggcagat agcactgggt gtgagaatga tcaaggatct ggaccccaaa    3900
gaatagactg gatggaaaga caaactgcac aggcagatgt ttgcctcata atagtcgtaa    3960
gtggagtcct ggaatttgga caagtgctgt tgggatatag tcaacttatt ctttgagtaa    4020
tgtgactaaa ggaaaaaact ttgactttgc ccaggcatga aattcttccc aatgtcagaa    4080
cagagtgcaa cccagtcaca ctgtggccag taaaatacta ttgcctcata ttgtcctctg    4140
caagcttctt gctgatcaga gttcctccta cttacaaccc agggtgtgaa catgttctcc    4200
attttcaagc tggaagaagt gagcagtgtt ggagtgagga cctgtaaggc aggcccattc    4260
agagctatgg tgcttgctgg tgcctgccac cttcaagttc tggacctggg catgacatcc    4320
tttcttttaa tgatgccatg gcaacttaga gattgcattt ttattaaagc atttcctacc    4380
agcaaagcaa atgttgggaa agtatttact ttttcggttt caaagtgata gaaaagtgtg    4440
gcttgggcat tgaaagaggt aaaattctct agatttatta gtcctaattc aatcctactt    4500
ttagaacacc aaaaatgatg cgcatcaatg tattttatct tatttttcta atctcctctc    4560
tctttcctcc acccataata agagaatgtt cctactcaca cttcagctgg gtcacatcca    4620
tcccttccatt catccttcca tccatctttc catccattac ctccatccat ccttccaaca    4680
tatatttatt gagtacctac tgtgtgccag gggctggtgg gacagtggtg acatagtctc    4740
tgccctcata gagttgattg tctagtgagg aagacaagca tttttaaaaa ataaatttaa    4800
acttacaaac tttgtttgtc acaagtggtg tttattgcaa taaccgcttg gtttgcaacc    4860
tcttttgctca acagaacata tgttgcaaga ccctcccatg ggggcacttg agttttggca    4920
aggctgacag agctctgggt tgtgcacatt tcttttgcatt ccagctgtca ctctgtgcct    4980
ttctacaact gattgcaaca gactgttgag ttatgataac accagtggga attgctggag    5040
gaaccagagg cacttccacc ttggctggga agactatggt gctgccttgc ttctgtattt    5100
ccttggattt tcctgaaagt gtttttaaat aaagaacaat tgttagaaaa aaaaaa        5156
```

<210> 131
<211> 671
<212> DNA
<213> Homo sapien

<400> 131
aggtctggag ggcccacagc cggatgtggg acaccgggaa aaagtggtca tagcacacat 60
ttttgcatcc cggttgcagt gtgttgcaga cgaagtcctc ttgctcgtca ccccacactt 120
cctgggcagc caycacgagg atcatgactc ggaaaataaa gatgactgtg atccacacct 180
tcccgatgct ggtggagtgt ttgttgacac ccccgatgaa agtgtgcagc gtcccccaat 240
ccattgcgct ggtttatccc tgagtcctgt ttccaacgac tgccagtgtt tcagacccaa 300
agaatgaggg caagatccct ctgcgagggt ttcagacctc cttctcctac cccactggag 360
tgcctagaag ccaatgggtg cacagtgatg atacgaatgt caatctttgc tcggtcagtg 420
aggatgtcgc ctggaatatt caaattgaat tacagatgca tgaagagggc gtacaagtta 480
gaatttttct ttcgccatac agaaattgtt tagccagatc ttctgtactt cttttccttc 540
cctgaccctt cctgctcccc aggaagggag gtcagccccg tttgcaaaac acaggatgcc 600
cgtgacaccg gagacaggtc ttcttcaccg acaggaagtg ccttctggtg cctgcacgtt 660
ttaactgcta t 671

<210> 132
<211> 590
<212> DNA
<213> Homo sapien

<400> 132
ctgaatggaa aagcttatgg ctctgtgatg atattagtga ccagcggaga tgataagctt 60
cttggcaatt gcttacccac tgtgctcagc agtggttcaa caattcactc cattgccctg 120
ggttcatctg cagccccaaa tctggaggaa ttatcacgtc ttacaggagg tttaaagttc 180
tttgttccag atatatcaaa ctccaatagc atgattgatg ctttcagtag aatttcctct 240
ggaactggag acattttcca gcaacatatt cagcttgaaa gtacaggtga aaatgtcaaa 300
cctcaccatc aattgaaaaa cacagtgact gtggataata crgtgggcaa cgacactatg 360
tttctagtta cgtggcaggc cagtggtcct cctgagatta tattatttga tcctgatgga 420
cgaaaatact acacaaataa ttttatcacc aatctaactt ttcggacagc tagtctttgg 480
attccaggaa cagctaagcc tgggcactgg acttacaccc tgaacaatac ccatcattct 540
ctgcaagccc tgaaagtgac agtgacctct cgcgcctcca actcagacct 590

<210> 133
<211> 581
<212> DNA
<213> Homo sapien

<400> 133
aggtcctgtc cgggggcact gagaactccc tctggaattc ttgggggtg ttggggagag 60
actgtgggcc tggagataaa acttgtctcc tctaccacca ccctgtaccc tagcctgcac 120
ctgtcctcat ctctgcaaag ttcagcttcc ttccccaggt ctctgtgcac tctgtcttgg 180
atgctctggg gagctcatgg gtggaggagt ctccaccaga gggaggctca ggggactggt 240
tgggccaggg atgaatattt gagggataaa aattgtgtaa gagccaaaga attggtagta 300
gggggagaac agagaggagc tgggctatgg gaaatgattt gaataatgga gctgggaata 360
tggctggata tctggtacta aaaaagggtc tttaagaacc tacttcctaa tctcttcccc 420
aatccaaacc atagctgtct gtccagtgct ctcttcctgc ctccagctct gccccaggct 480
cctcctagac tctgtccctg ggctagggca ggggaggagg gagagcaggg ttgggggaga 540
ggctgaggag agtgtgacat gtggggagag gaccagacct c 581

<210> 134
<211> 4797
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature

<222> (1)...(4797)
<223> n = A,T,C or G

<400> 134

cctgggacca aagtgctgcc cagagctgag ggtcctggag ccacatgaga aggcttctcc 60
ctgtgtacct gtgcagcaca gggtagggtg agtccactca gctgtctagg agaggaccca 120
ggagcagcag agacncgcca agcctttact cataccatat tctgatcctt ttccagcaaa 180
ttgtggctac taatttgccc cctgaagatc aagatggctc tggggatgac tctgacaact 240
tctccggctc aggtgcaggt gaggttgtca tgggggcccc ccccacccaa gacggcaaca 300
ggtcatgcct gggggcagtg gtcaggcagt ctcctgtgtt tactgagcat gtactgagtg 360
caccctgcct gccctgtctc cacccagctg gctccaaagg gcaatgctga ggagaggaat 420
ggggtcgtga gctgctgtta aggagagctc atgcttggag gtgaggtgaa ggctgtgagc 480
tccagaaggc cccagggcgc nctgctgcac gcaggctcat attcactagg aatagcttta 540
ctcactaaga aacctctgga acccccttca gaaggttatt tgactcctga gcctctattt 600
tctcatctgc aaaatgggaa taataccttg acctgataag cttgtggagc tgtaaggcag 660
cacagagcca gctggggtgt agctcttcca tccaagctcc cttccttact tccccttccc 720
tgtggggact gggggagaga agtcccctgag ctggaggtgg tcagggaagc ttcacagagg 780
aggtggctct tgagtggacc tcaggaagag gggtgagaga gctaaggaag gaggctgagg 840
tcatccctgg ggaagtgacc tagcggaggc ctgagagctg caaggtagga tatctgttgt 900
tggaagtgtc tgttgttgga agtgggggcc ttttttttcag ggagggtggg gccagagaag 960
tgtgtgccct gggataagta ggataaccac agtagttatg ccccctaaggg atgcccaccc 1020
caccctgtg gtcacagaaa agctttccca ggtggcctag gcacctgtct cgtggctcca 1080
gagacaggct gcacctgaca cacacaatgg aaggacagct ctccttgtcc attttccaag 1140
gagcttagcc tcagctgcct tgtccaggta ctagcctccc tcatagcttg agcttggcca 1200
gcccaggtgc tctggagcct ccccccgaccc acccaacaca ctctgcttct ggtcctcccc 1260
acccccccacc tccccaacac actctgcttc tggtcctgca ggtgctttgc aagatatcac 1320
cttgtcacag cagaccccct ccacttggaa ggacacgcag ctcctgacgg ctattcccac 1380
gtctccagaa cccaccggcc tggaggctac agctgcctcc acctccaccc tgccggctgg 1440
agaggggccc aaggagggag aggctgtagt cctgccagaa gtggagcctg gcctcaccgc 1500
ccgggagcag gaggccaccc cccgacccag ggagaccaca cagctcccga ccactcatca 1560
ggcctcaacg accacagcca ccacggccca ggagccccgcc acctcccacc cccacaggga 1620
catgcagcct ggccaccatg agacctcaac ccctgcagga cccagccaag ctgaccttca 1680
cactccccac acagaggatg gaggtccttc tgccaccgag agggctgctg aggatggagc 1740
ctccagtcag ctcccagcag cagagggctc tggggagcag gtgagtggcc tctgcattcc 1800
ttgggaaatt gagtgggttg gtcctaatgc ctggcacttg gcaggcccta cacctgtgcc 1860
ctgcgcgatc tcgtattcct caccaggaag acagggcaca ggggccgcct tcccctaccc 1920
ccagggcctc gcagagcagg acagactaac tatgagatca gagcagaagc acccttaaag 1980
atcacccaag agagggctcc caaactcaca atccaaactt gcagccctcg tcgaagagtg 2040
aacgttatac cagtcatttt atttatagct tcgtggattt acgcttacac taaatagtct 2100
gctattcata caaaatgtgt gctttgtatc acttttgtg atatccatgc catggtccag 2160
ccagggtccg gagttgatgt ggcaagaagg cctggctttc gggccctgtg cgatcctggt 2220
ttgggtgcat ctgagtgggt ggtggcaaag atcagggagg caggagctgc ttctgggtct 2280
gtagtggagc tggttgctgc tgctggcggt gacctggcca acccaatctg cccctgccct 2340
cccacaggac ttcacctttg aaacctcggg ggagaatacg gctgtagtgg ccgtggagcc 2400
tgaccgccgg aaccagtccc cagtggatca gggggccacg ggggcctcac agggcctcct 2460
ggacaggaaa gaggtgctgg gaggtgagtt ttcttttcagg ggggtagttt ggggtgaatt 2520
gctgctgtgg ggtcagggtg gggctgacca cagccaaggc cactgctttg ggagggtctg 2580
cacgagagcc caaggagccg ctgagctgag ctggccccgt ctacctgccc taggggtcat 2640
tgccggaggc ctcgtggggc tcatctttgc tgtgtgcctg gtgggtttca tgctgtaccg 2700
catgaagaag aaggacgaag gcagctactc cttggaggag ccgaaacaag ccaacggcgg 2760
ggcctaccag aagcccacca aacaggagga attctatgcc tgacgcggga gccatgcgcc 2820
ccctccgccc tgccactcac taggcccccа cttgcctctt ccttgaagaa ctgcaggccc 2880
tggcctcccc tgccaccagg ccacctcccc agcattccag ccccctctggt cgctcctgcc 2940
cacggagtcg tgggtgtgct gggagctcca ctctgcttct ctgacttctg cctggagact 3000
tagggcacca ggggtttctc gcataggacc tttccaccac agccagcacc tggcatcgca 3060

ccattctgac tcggtttctc caaactgaag cagcctctcc ccaggtccag ctctggaggg 3120
gaggggatc cgactgcttt ggacctaaat ggcctcatgt ggctggaaga tcctgcgggt 3180
ggggcttggg gctcacacac ctgtagcact tactggtagg accaagcatc ttgggggggt 3240
ggccgctgag tggcagggga caggagtcac tttgtttcgt ggggaggtct aatctagata 3300
tcgacttgtt tttgcacatg tttcctctag ttctttgttc atagcccagt agaccttgtt 3360
acttctgagg taagttaagt aagttgattc ggtatccccc catcttgctt ccctaatcta 3420
tggtcgggag acagcatcag ggttaagaag actttttttt ttttttttaa actaggagaa 3480
ccaaatctgg aagccaaaat gtaggcttag tttgtgtgtt gtctcttgag tttgtcgctc 3540
atgtgtgcaa cagggtatgg actatctgtc tggtggcccc gttctggtgg tctgttggca 3600
ggctggccag tccaggctgc cgtggggccg ccgcctcttt caagcagtcg tgcctgtgtc 3660
catgcgctca gggccatgct gaggcctggg ccgctgccac gttggagaag cccgtgtgag 3720
aagtgaatgc tgggactcag ccttcagaca gagaggactg tagggagggc ggcaggggcc 3780
tggagatcct cctgcaggct cacgcccgtc ctcctgtggc gccgtctcca ggggctgctt 3840
cctcctggaa attgacgagg ggtgtcttgg gcagagctgg ctctgagcgc ctccatccaa 3900
ggccaggttc tccgttagct cctgtggccc caccctgggc cctgggctgg aatcaggaat 3960
attttccaaa gagtgatagt cttttgcttt tggcaaaact ctacttaatc caatgggttt 4020
ttccctgtac agtagatttt ccaaatgtaa taaactttaa tataaagtag tctgtgaatg 4080
ccactgcctt cgcttcttgc ctctgtgctg tgtgtgacgt gaccggactt ttctgcaaac 4140
accaacatgt tgggaaactt ggctcgaatc tctgtgcctt cgtctttccc atggggaggg 4200
attctggttc cagggtccct ctgtgtattt gcttttttgt tttggctgaa attctcctgg 4260
aggtcggtag gttcagccaa ggttttataa ggctgatgtc aatttctgtg ttgccaagct 4320
ccaagcccat cttctaaatg gcaaaggaag gtggatggcc ccagcacagc ttgacctgag 4380
gctgtggtca cagcggaggt gtggagccga ggcctacccc ncagacacct tggacatcct 4440
cctcccaccc ggctgcagag gccaganncc agcccagggt cctgcactta cttgcttatt 4500
tgacaacgtt tcagcgactc cgttggccac tccgagagtg ggccagtctg tggatcagag 4560
atgcaccacc aagccaaggg aacctgtgtc cggtattcga tactgcgact ttctgcctgg 4620
agtgtatgac tgcacatgac tcgggggtgg ggaaaggggt cggctgacca tgctcatctg 4680
ctggtccgtg ggacggtncc caagccagag gtgggttcat ttgtgtaacg acaataaacg 4740
gtacttgtca tttcgggcaa cggctgctgt ggtggtggtt gagtctcttc ttggctt 4797

<210> 135
<211> 2856
<212> DNA
<213> Homo sapien

<400> 135
tagtcgcggg tccccgagtg agcacgccag ggagcaggag accaaacgac gggggtcgga 60
gtcagagtcg cagtgggagt ccccggaccg gagcacgagc ctgagcggga gagcgccgct 120
cgcacgcccg tcgccacccg cgtacccggc gcagccagag ccaccagcgc agcgctgcca 180
tggagcccag cagcaagaag ctgacgggtc gcctcatgct ggctgtggga ggagcagtgc 240
ttggctccct gcagtttggc tacaacactg gagtcatcaa tgcccccag aaggtgatcg 300
aggagttcta caaccagaca tgggtccacc gctatgggga gagcatcctg cccaccacgc 360
tcaccacgct ctggtccctc tcagtggcca tcttttctgt tgggggcatg attggctcct 420
tctctgtggg ccttttcgtt aaccgctttg gccggcggaa ttcaatgctg atgatgaacc 480
tgctggcctt cgtgtccgcc gtgctcatgg gcttctcgaa actgggcaag tcctttgaga 540
tgctgatcct gggccgcttc atcatcggtg tgtactgcgg cctgaccaca ggcttcgtgc 600
ccatgtatgt gggtgaagtg tcacccacag ccttccgtgg ggccctgggc accctgcacc 660
agctgggcat cgtcgtcggc atcctcatcg cccaggtgtt cggcctggac tccatcatgg 720
gcaacaagga ccgtggccc ctgctgctga gcatcatctt catcccggcc ctgctgcagt 780
gcatcgtgct gccattctgc cccgagagtc cccgcttcct gctcatcaac cgcaacgagg 840
agaaccgggc caagagtgtg ctaaagaagc tgcgcgggac agctgacgtg acccatgacc 900
tgcaggagat gaaggaagag agtcggcaga tgatgcggga gaagaaggtc accatcctgg 960
agctgttccg ctccccgcc taccgccagc ccatcctcat cgctgtggtg ctgcagctgt 1020
cccagcagct gtctggcatc aacgctgtct tctattactc cacgagcatc ttcgagaagg 1080
cgggggtgca gcagcctgtg tatgccacca ttggctccgg tatcgtcaac acggccttca 1140

ctgtcgtgtc gctgtttgtg gtggagcgag caggccggcg gaccctgcac ctcataggcc 1200
tcgctggcat ggcgggttgt gccatactca tgaccatcgc gctagcactg ctggagcagc 1260
taccctggat gtcctatctg agcatcgtgg ccatcttttgg ctttgtggcc ttctttgaag 1320
tgggtcctgg ccccatccca tggttcatcg tggctgaact cttcagccag ggtccacgtc 1380
cagctgccat tgccgttgca ggcttctcca actggacctc aaatttcatt gtgggcatgt 1440
gcttccagta tgtggagcaa ctgtgtggtc cctacgtctt catcatcttc actgtgctcc 1500
tggttctgtt cttcatcttc acctacttca aagttcctga gactaaaggc cggaccttcg 1560
atgagatcgc ttccggcttc cggcaggggg gagccagcca aagtgataag acacccgagg 1620
agctgttcca tcccctgggg gctgattccc aagtgtgagt cgccccagat caccagcccg 1680
gcctgctccc agcagcccta aggatctctc aggagcacag gcagctggat gagacttcca 1740
aacctgacag atgtcagccg agccgggcct ggggctcctt tctccagcca gcaatgatgt 1800
ccagaagaat attcaggact taacggctcc aggattttaa caaaagcaag actgttgctc 1860
aaatctattc agacaagcaa caggttttat aatttttta ttactgattt tgttatttt 1920
atatcagcct gagtctcctg tgcccacatc ccaggcttca ccctgaatgg ttccatgcct 1980
gagggtggag actaagcccc gtcgagacac ttgccttctt cacccagcta atctgtaggg 2040
ctggacctat gtcctaagga cacactaatc gaactatgaa ctacaaagct tctatcccag 2100
gaggtggcta tggccacccg ttctgctggc ctggatctcc ccactctagg ggtcaggctc 2160
cattaggatt tgccccttcc catctcttcc tacccaacca ctcaaattaa tctttcttta 2220
cctgagacca gttgggagca ctggagtgca gggaggagag gggaagggcc agtctgggct 2280
gccgggttct agtctccttt gcactgaggg ccacactatt accatgagaa gagggcctgt 2340
gggagcctgc aaactcactg ctcaagaaga catggagact cctgccctgt tgtgtataga 2400
tgcaagatat ttatatatat ttttggttgt caatattaaa tacagacact aagttatagt 2460
atatctggac aagccaactt gtaaatacac cacctcactc ctgttactta cctaaacaga 2520
tataaatggc tggtttttag aaacatggtt ttgaaatgct tgtggattga gggtaggagg 2580
tttggatggg agtgagacag aagtaagtgg ggttgcaacc actgcaacgg cttagacttc 2640
gactcaggat ccagtcccct acacgtacct ctcatcagtg tcctcttgct caaaaatctg 2700
tttgatccct gttacccaga gaatatatac attctttatc ttgacattca aggcatttct 2760
atcacatatt tgatagttgg tgttcaaaaa aacactagtt ttgtgccagc cgtgatgctc 2820
aggcttgaaa tcgcattatt ttgaatgtga agggaa 2856

<210> 136
<211> 356
<212> DNA
<213> Homo sapien

<400> 136
ggtggagcca aatgaagaaa atgaagatga aagagacaga cacctcagtt tttctggatc 60
aggcattgat gatgatgaag attttatctc cagcaccatt tcaaccacac cacgggcttt 120
tgaccacaca aaacagaacc aggactggac tcagtggaac ccaagccatt caaatccgga 180
agtgctactt cagacaacca caaggatgac tgatgtagac agaaatggca ccactgctta 240
tgaaggaaac tggaacccag aagcacaccc tcccctcatt caccatgagc atcatgagga 300
agaagagacc ccacattcta caagcacaat ccaggcaact cctagtagta caacgg 356

<210> 137
<211> 356
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(356)
<223> n = A,T,C or G

<400> 137
gcaggtggag aagacatttt attgttcctg gggtctctgg aggcccattg gtggggctgg 60

gtcactggct gcccccggaa cagggcgctg ctccatggct ctgcttgtgg tagtctgtgg 120
ctatgtctcc cagcaaggac agaaactcag aaaaatcaat cttcttatcc tcattcttgt 180
ccttttttctc aaagacatcg gcgaggtaat ttgtgccctt tttacctcgg cccgcgacca 240
cgctaaggcc aaanttccag acanayggcc gggccggtnc nataggggan cccaacttgg 300
ggacccaaac tctggcgcgg aaacacangg gcataagctt gnttcctgtg gggaaa 356

<210> 138
<211> 353
<212> DNA
<213> Homo sapien

<400> 138
aggtccagtc ctccacttgg cctgatgaga gtggggagtg gcaagggacg tttctcctgc 60
aatagacact tagatttctc tcttgtggga agaaaccacc tgtccatcca ctgactcttc 120
tacattgatg tggaaattgc tgctgctacc accacctcct gaagaggctt ccctgatgcc 180
aatgccagcc atcttggcat cctggccctc gagcaggctg cggtaagtag cgatctcctg 240
ctccagccgt gtctttatgt caagcagcat cttgtactcc tggttctgag cctccatctc 300
gcatcggagc tcactcagac ctcgsccgsg mssmcgctam gccgaattcc agc 353

<210> 139
<211> 371
<212> DNA
<213> Homo sapien

<400> 139
agcgtggtcg cggccgaggt ccatccgaag caagattgca gatggcagtg tgaagagaga 60
agacatattc tacactttcaa agctttggtg caattcccat cgaccagagt tggtccgacc 120
agccttggaa aggtcactga aaaatcttca attggattat gttgacctct accttattca 180
ttttccagtg tctgtaaagc caggtgagga agtgatccca aaagatgaaa atggaaaaat 240
actatttgac acagtggatc tctgtgccac gtgggaggcc gtggagaagt gtaaagatgc 300
aggattggac ctgcccgggc ggccgcttcga aagccgaatt ccagcacact ggcggccgtt 360
actagtggat c 371

<210> 140
<211> 370
<212> DNA
<213> Homo sapien

<400> 140
tagcgtggtc gcggccgagg tccatctccc tttgggaact agggggctgc tggtgggaaa 60
tgggagccag ggcagatgtt gcattccttt gtgtccctgt aaatgtggga ctacaagaag 120
aggagctgcc tgagtggtac tttctcttcc tggtaatcct ctggcccagc ctcatggcag 180
aatagaggta ttttaggct atttttgtaa tatggcttct ggtcaaaatc cctgtgtagc 240
tgaattccca agccctgcat tgtacagccc cccactcccc tcaccaccta ataaaggaat 300
agttaacact caaaaaaaaa aaaaaacctg cccgggcggc cgctcgaaag ccgaattcca 360
gcacactggc 370

<210> 141
<211> 371
<212> DNA
<213> Homo sapien

<400> 141
tagcgtggtc gcggccgagg tcctctgtgc tgcctgtcac agcccgatgg taccagcgca 60
gggtgtaggc agtgcaggag ccctcatcca gtggcaggga acaggggtca tcactatccc 120

aaggagcttc agggtcctgg tactcctcca cagaatactc ggagtattca gagtactcat 180
catcctcagg gggtacccgc tcttcctcct ctgcatgaga gacgcggagc acaggcacag 240
catggagctg ggagccggca gtgtctgcag cataactagg gaggggtcgt gatccagatg 300
cgatgaactg gccctggcag gcacagtgct gactcatctc ttggcgacct gcccgggcgg 360
ccgctcgaag c 371

<210> 142
<211> 343
<212> DNA
<213> Homo sapien

<400> 142
gcgttttgag gccaatggtg taaaaggaaa tatcttcaca taaaaactag atggaagcat 60
tgtcagaaac ctctttgtga tgtttgcttt caactcacag agttgaacat tccttttcat 120
agagcagttt tgaaacactc ttttgtagaa tttgcaagcg gatgattgga tcgctatgag 180
gtcttcattg gaaacgggat acctttacat aaaaactaga cagtagcatt ctcagaaatt 240
tctttgggat gtgggcattc aacccacaga ggagaacttc atttgataga gcagttttga 300
aacacccttt ttgtagaatc tacaggtgga catttagagt gct 343

<210> 143
<211> 354
<212> DNA
<213> Homo sapien

<400> 143
aggtctgatg gcagaaaaac tcagactgtc tgcaacttta cagatggtgc attggttcag 60
catcaggagt gggatgggaa ggaaagcaca ataacaagaa aattgaaaga tgggaaatta 120
gtggtggagt gtgtcatgaa caatgtcacc tgtactcgga tctatgaaaa agtagaataa 180
aaattccatc atcactttgg acaggagtta attaagagaa tgaccaagct cagttcaatg 240
agcaaatctc catactgttt ctttcttttt ttttttcatta ctgtgttcaa ttatctttat 300
cataaacatt ttacatgcag ctatttcaaa gtgtgttgga ttaattagga tcat 354

<210> 144
<211> 353
<212> DNA
<213> Homo sapien

<400> 144
ggtcaaggac ctgggggacc cccaggtcca gcagccacat gattctgcag cagacaggga 60
cctagagcac atctggatct cagccccacc cctggcaacc tgcctgccta gagaactccc 120
aagatgacag actaagtagg attctgccat ttagaataat tctggtatcc tgggcgttgc 180
gttaagttgc ttaactttca ttctgtctta cgatagtctt cagaggtggg aacagatgaa 240
gaaaccatgc cccagagaag gttaagtgac ttcctcttta tggagccagt gttccaacct 300
aggtttgcct gataccagac ctgtggcccc acctcccatg caggtctctg tgg 353

<210> 145
<211> 371
<212> DNA
<213> Homo sapien

<400> 145
caggtctgtc ataaactggt ctggagtttc tgacgactcc ttgttcacca aatgcaccat 60
ttcctgagac ttgctggcct ctccgttgag tccacttggc tttctgtcct ccacagctcc 120
attgccactg ttgatcacta gctttttctt ctgcccacac cttcttcgac tgttgactgc 180
aatgcaaact gcaagaatca aagccaaggc caagagggat gccaagatga tcagccattc 240

tggaatttgg ggtgtcctta taggaccaga ggttgtgttt gctccacctt cttgactccc 300
atgtgagacc tcggccgcga ccacgctaag ccgaattcca gcacactggc ggcccgttac 360
tagtggatcc g 371

<210> 146
<211> 355
<212> DNA
<213> Homo sapien

<400> 146
ggtcctccgt cctcttccca gaggtgtcgg ggcttggccc cagcctccat cttcgtctct 60
caggatggcg agtagcagcg gctccaaggc tgaattcatt gtcggaggga aatataaact 120
ggtacggaag atcgggtctg gctccttcgg ggacatctat ttggcgatca acatcaccaa 180
cggcgaggaa gtggcagtga agctagaatc tcagaaggcc aggcatcccc agttgctgta 240
cgagagcaag ctctataaga ttcttcaagg tggggttggc atcccccaca tacggtggta 300
tggtcaggaa aaagactaca atgtactagt catggatctt ctgggaccta gcctc 355

<210> 147
<211> 355
<212> DNA
<213> Homo sapien

<400> 147
ggtctgttac aaaatgaaga cagacaacac aacatttact ctgtggagat atcctactca 60
tactatgcac gtgctgtgat tttgaacata actcgtccca aaaacttgtc acgatcatcc 120
tgactttttа ggttggctga tccatcaatc ttgcactcaa ctgttacttc tttcccagtg 180
ttgttaggag caaagctgac ctgaacagca accaatggct gtagataccc aacatgcagt 240
ttttttccat aatatgggaa atatttтaag tctatcattc cattatgagg ataaactgct 300
acatttggta tatcttcatt ctttgaaaca caatctatcc ttggcactcc ttcag 355

<210> 148
<211> 369
<212> DNA
<213> Homo sapien

<400> 148
aggtctctct cccctctcc ctctcctgcc agccaagtga agacatgctt acttcccctt 60
caccttcctt catgatgtgg gaagagtgct gcaacccagc cctagccaac accgcatgag 120
agggagtgtg ccgagggctt ctgagaaggt ttctctcaca tctagaaaga agcgcttaag 180
atgtggcagc ccctcttctt caagtggctc ttgtcctgtt gccctgggag ttctcaaatt 240
gctgcagcag cctccatcca gcctgaggat gacatcaata cacagaggaa gaagagtcag 300
gaaaagatga gagaagttac agactctcct gggcgacccc gagagcttac cattcctcag 360
acttcttca 369

<210> 149
<211> 620
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(620)
<223> n = A,T,C or G

<400> 149

actagtcaaa aatgctaaaa taatttggga gaaaatattt tttaagtagt gttatagttt 60
catgtttatc ttttattatg ttttgtgaag ttgtgtcttt tcactaatta cctatactat 120
gccaatattt ccttatatct atccataaca tttatactac atttgtaana naatatgcac 180
gtgaaactta acactttata aggtaaaaat gaggtttcca anatttaata atctgatcaa 240
gttcttgtta tttccaaata gaatggactt ggtctgttaa gggctaagga gaagaggaag 300
ataaggttaa aagttgttaa tgaccaaaca ttctaaaaga aatgcaaaaa aaaagtttat 360
tttcaagcct tcgaactatt taaggaaagc aaaatcattt cctaaatgca tatcatttgt 420
gagaatttct cattaatatc ctgaatcatt catttcacta aggctcatgt tnactccgat 480
atgtctctaa gaaagtacta tttcatggtc caaaccttggt tgccatantt gggtaaaggc 540
tttcccttaa gtgtgaaant atttaaaatg aaatttttcct ctttttaaaa attctttana 600
agggttaagg gtgttgggga 620

<210> 150
<211> 371
<212> DNA
<213> Homo sapien

<400> 150
ggtccgatca aaacctgcta cctccccaag actttactag tgccgataaa ctttcttaaa 60
gagcaaccag tatcacttcc ctgtttataa aacctctaac catctctttg ttctttgaac 120
atgctgaaaa ccacctggtc tgcatgtatg tccgaatttg yaattctttt ctctcaaatg 180
aaaatttaat tttagggatt catttctata ttttcacata tgtagtatta ttatttcctt 240
atatgtgtaa ggtgaaattt atggtatttg agtgtgcaag aaaatatatt tttaaagctt 300
tcatttttcc cccagtgaat gatttagaat tttttatgta aatatacaga atgttttttc 360
ttacttttat a 371

<210> 151
<211> 4655
<212> DNA
<213> Homo sapien

<400> 151
gggacttgag ttctgttatc ttcttaagta gattcatatt gtaagggtct cggggtgggg 60
gggttggcaa aatcctggag ccagaagaaa ggacagcagc attgatcaat cttacagcta 120
acatgttgta cctggaaaac aatgcccaga ttcaatttag tgagccacag tacacgaacc 180
tggggctcct gaacagcatg gaccagcaga ttcagaacgg ctcctcgtcc accagtccct 240
ataacacaga ccacgcgcag aacagcgtca tggcgccctc gccctacgca cagcccagct 300
ccaccttcga tgctctctct ccatcacccg tcatcccctc caacaccgac tacccaggcc 360
cgcacagttt cgacgtgtcc ttccagcagt cgagcaccgc caagtcggcc acctggacgt 420
attccactga actgaagaaa ctctactgcc aaattgcaaa gacatgcccc atccagatca 480
aggtgatgac cccacctcct cagggagctg ttatccgcgc catgcctgtc tacaaaaaag 540
ctgagcacgt cacggaggtg gtgaagcggt gccccaacca tgagctgagc cgtgaattca 600
acgagggaca gattgccccc yctagtcatt tgattcgagt agaggggaac agccatgccc 660
agtatgtaga agatcccatc acaggaagac agagtgtgct ggtaccttat gagccacccc 720
aggttggcac tgaattcacg acagtcttgt acaatttcat gtgtaacagc agttgtgttg 780
gagggatgaa ccgccgtcca attttaatca ttgttactct ggaaaccaga gatgggcaag 840
tcctgggccg acgctgcttt gaggcccgga tctgtgcttg cccaggaaga gacaggaagg 900
cggatgaaga tagcatcaga aagcagcaag tttcggacag tacaaagaac ggtgatggta 960
cgaagcgccc gtttcgtcag aacacacatg gtatccagat gacatccatc aagaaacgaa 1020
gatccccaga tgatgaactg gtatacttac tagtgagggg ccgtgagact tatgaaatgc 1080
tggtgaagat caaagagtcc ctggaactca tgcagtacct tcttcagcac acaattgaaa 1140
cgtacaggca acagcaacag cagcagcacc agcacttact tcagaaacag acctcaatac 1200
agtctccatc ttcatatggt aacagctccc cacctctgaa caaaatgaac agcatgaaca 1260
agctgccttc tgtgagccag cttatcaacc ttcagcagcg caacgccctc actcctacaa 1320
ccattcctga tggcatggga gccaacattc tcatgatggg cacccacatg ccaatggctg 1380

gagacatgaa tggactcagc cccacccagg cactccctcc cccactctcc atgccatcca 1440
cctcccactg cacaccccca cctccgtatc ccacagattg cagcattgtc agtttcttag 1500
cgaggttggg ctgttcatca tgtctggact atttcacgac ccaggggctg accaccatct 1560
atcagattga gcattactcc atggatgatc tggcaagtct gaaaatccct gagcaatttc 1620
gacatgcgat ctggaagggc atcctggacc accggcagct ccacgaattc tcctcccctt 1680
ctcatctcct gcggacccca agcagtgcct ctacagtcag tgtgggctcc agtgagaccc 1740
ggggtgagcg tgttattgat gctgtgcgat tcaccctccg ccagaccatc tctttcccac 1800
cccgagatga gtggaatgac ttcaactttg acatggatgc tcgccgcaat aagcaacagc 1860
gcatcaaaga ggaggggggag tgagcctcac catgtgagct cttcctatcc ctctcctaac 1920
tgccagcccc ctaaaagcac tcctgcttaa tcttcaaagc cttctcccta gctcctcccc 1980
ttcctcttgt ctgatttctt aggggaagga gaagtaagag gcttacttct taccctaacc 2040
atctgacctg gcatctaatt ctgattctgg ctttaagcct tcaaaactat agcttgcaga 2100
actgtagctt gccatggcta ggtagaagtg agcaaaaaag agttgggtgt ctccttaagc 2160
tgcagagatt tctcattgac ttttataaag catgttcacc cttatagtct aagactatat 2220
atataaatgt ataaatatac agtatagatt tttgggtggg gggcattgag tattgtttaa 2280
aatgtaattt aaatgaaaga aaattgagtt gcacttattg accatttttt aatttacttg 2340
ttttggatgg cttgtctata ctccttcccc taaggggtat catgtatggt gataggtatc 2400
tagagcttaa tgctacatgt gagtgacgat gatgtacaga ttctttcagt tctttggatt 2460
ctaaatacat gccacatcaa acctttgagt agatccattt ccattgctta ttatgtaggt 2520
aagactgtag atatgtattc ttttctcagt gttggtatat tttatattac tgacatttct 2580
tctagtgatg atggttcacg ttggggtgat ttaatccagt tataagaaga agttcatgtc 2640
caaacgtcct ctttagtttt tggttgggaa tgaggaaaat tcttaaaagg cccatagcag 2700
ccagttcaaa aacacccgac gtcatgtatt tgagcatatc agtaacccca ttaaatttaa 2760
taccagatac cttatcttac aatattgatt gggaaaacat ttgctgccat tacagaggta 2820
ttaaaactaa atttcactac tagattgact aactcaaata cacatttgct actgttgtaa 2880
gaattctgat tgatttgatt gggatgaatg ccatctatct agttctaaca gtgaagtttt 2940
actgtctatt aatattcagg gtaaatagga atcattcaga aatgttgagt ctgtacttaa 3000
cagtaagata tctcaatgaa ccataaattc aactttgtaa aaatcttttg aagcatagat 3060
aatattgttt ggtaaatgtt tcttttgttt ggtaaatgtt tcytttaaag acccttctat 3120
tctataaaac tctgcatgta gaggcttgtt taccttttct tctctaaggt ttacaatagg 3180
agtggtgatt tgaaaaatat aaaattatga gattggtttt cctgtggcat aaattgcatc 3240
actgtatcat ttttttttt aaccggtaag agtttcagtt tgttggaaag taactgtgag 3300
aacccagttt cccgtccatc tcccttaggg actacccata gacatgaaag gtcccctacag 3360
agcaagagat aagtctttca tggctgctgt tgcttaaacc acttaaacga agagttcccc 3420
tgaaactttg ggaaaacatg ttaatgacaa tattccagat ctttcagaaa tataacacat 3480
ttttttgcat gcatgcaaat gagctctgaa atcttcccat gcattctggt caagggctgt 3540
cattgcacat aagcttccat tttaatttta aagtgcaaaa gggccagcgt ggctctaaaa 3600
ggtaatgtgt ggattgcctc tgaaaagtgt gtatatattt tgtgtgaaat tgcatacttt 3660
gtattttgat tatttttttt ttcttcttgg gatagtggga tttccagaac cacacttgaa 3720
acctttttt atcgtttttg tattttcatg aaaataccat ttagtaagaa taccacatca 3780
aataagaaat aatgctacaa ttttaagagg ggagggaagg gaaagttttt ttttttatta 3840
ttttttttaaa attttgtatg ttaaagagaa tgagtccttg atttcaaagt tttgttgtac 3900
ttaaatggta ataagcactg taaacttctg caacaagcat gcagctttgc aaacccatta 3960
aggggaagaa tgaaagctgt tccttggtcc tagtaagaag acaaactgct tcccttactt 4020
tgctgagggt ttgaataaac ctaggacttc cgagctatgt cagtactatt caggtaacac 4080
tagggccttg gaaatccctg tactgtgtct catggatttg gcactagcca aagcgaggca 4140
ccccttactg gcttacctcc tcatggcagc ctactctcct tgagtgtatg agtagccagg 4200
gtaaggggta aaaggatagt aagcatagaa accactagaa agtgggctta atggagttct 4260
tgtggcctca gctcaatgca gttagctgaa gaattgaaaa gtttttgttt ggagacgttt 4320
ataaacagaa atggaaagca gagttttcat taaatccttt tacctttttt ttttcttggt 4380
aatccccctaa aataacagta tgtgggatat tgaatgttaa agggatattt ttttctatta 4440
tttttataat tgtacaaaat taagcaaatg ttaaaagttt tatatgcttt attaatgttt 4500
tcaaaaggta ttatacatgt gatacatttt ttaagcttca gttgcttgtc ttctggtact 4560
ttctgttatg ggcttttggg gagccagaag ccaatctaca atctcttttt gtttgccagg 4620
acatgcaata aaatttaaaa aataaataaa aacta 4655

<210> 152
<211> 586
<212> PRT
<213> Homo sapien

<400> 152

```
Met Leu Tyr Leu Glu Asn Asn Ala Gln Thr Gln Phe Ser Glu Pro Gln
 1               5                  10                  15
Tyr Thr Asn Leu Gly Leu Leu Asn Ser Met Asp Gln Gln Ile Gln Asn
            20                  25                  30
Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
        35                  40                  45
Val Thr Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala
    50                  55                  60
Leu Ser Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro
65                  70                  75                  80
His Ser Phe Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala
                85                  90                  95
Thr Trp Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala
            100                 105                 110
Lys Thr Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Pro Gln Gly
        115                 120                 125
Ala Val Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr
    130                 135                 140
Glu Val Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn
145                 150                 155                 160
Glu Gly Gln Ile Ala Pro Ser Ser His Leu Ile Arg Val Glu Gly Asn
                165                 170                 175
Ser His Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val
            180                 185                 190
Leu Val Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val
        195                 200                 205
Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
    210                 215                 220
Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val
225                 230                 235                 240
Leu Gly Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg
                245                 250                 255
Asp Arg Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp
            260                 265                 270
Ser Thr Lys Asn Gly Asp Gly Thr Lys Arg Pro Phe Arg Gln Asn Thr
        275                 280                 285
His Gly Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp
    290                 295                 300
Glu Leu Val Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu
305                 310                 315                 320
Val Lys Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Leu Gln His
                325                 330                 335
Thr Ile Glu Thr Tyr Arg Gln Gln Gln Gln Gln Gln His Gln His Leu
            340                 345                 350
Leu Gln Lys Gln Thr Ser Ile Gln Ser Pro Ser Ser Tyr Gly Asn Ser
        355                 360                 365
Ser Pro Pro Leu Asn Lys Met Asn Ser Met Asn Lys Leu Pro Ser Val
    370                 375                 380
```

```
Ser Gln Leu Ile Asn Pro Gln Gln Arg Asn Ala Leu Thr Pro Thr Thr
385                 390                 395                 400
Ile Pro Asp Gly Met Gly Ala Asn Ile Pro Met Met Gly Thr His Met
                405                 410                 415
Pro Met Ala Gly Asp Met Asn Gly Leu Ser Pro Thr Gln Ala Leu Pro
            420                 425                 430
Pro Pro Leu Ser Met Pro Ser Thr Ser His Cys Thr Pro Pro Pro Pro
        435                 440                 445
Tyr Pro Thr Asp Cys Ser Ile Val Ser Phe Leu Ala Arg Leu Gly Cys
    450                 455                 460
Ser Ser Cys Leu Asp Tyr Phe Thr Thr Gln Gly Leu Thr Thr Ile Tyr
465                 470                 475                 480
Gln Ile Glu His Tyr Ser Met Asp Asp Leu Ala Ser Leu Lys Ile Pro
                485                 490                 495
Glu Gln Phe Arg His Ala Ile Trp Lys Gly Ile Leu Asp His Arg Gln
            500                 505                 510
Leu His Glu Phe Ser Ser Pro Ser His Leu Leu Arg Thr Pro Ser Ser
        515                 520                 525
Ala Ser Thr Val Ser Val Gly Ser Ser Glu Thr Arg Gly Glu Arg Val
    530                 535                 540
Ile Asp Ala Val Arg Phe Thr Leu Arg Gln Thr Ile Ser Phe Pro Pro
545                 550                 555                 560
Arg Asp Glu Trp Asn Asp Phe Asn Phe Asp Met Asp Ala Arg Arg Asn
                565                 570                 575
Lys Gln Gln Arg Ile Lys Glu Glu Gly Glu
            580                 585
```

<210> 153
<211> 2007
<212> DNA
<213> Homo sapien

<400> 153

```
gaattcgtcg ctgctccagg gaaagttctg ttactccact gactctctct tttcctgata      60
acatggccag caagaaagta attacagtgt ttggagcaac aggagctcaa ggtggctctg     120
tggccagggc aattttggag agcaaaaaat ttgcagtgag agcagtgacc agggatgtga     180
cttgaccaaa tgccctggag ctccagcgcc ttggagctga ggtggtcaaa ggtgacctga     240
atgataaagc atcggtggac agtgccttaa aaggtgtcta tggggccttc ttggtgacca     300
actttctggga ccctctcaac caagataagg aagtgtgtcg ggggaagctg gtggcagact    360
ccgccaagca cctgggtctg aagcacgtgg tgtacagcgg cctggagaac gtcaagcgac     420
tgacggatgg caagctggag gtgccgcact ttgacagcaa gggcgaggtg gaggagtact     480
tctggtccat tggcatcccc atgaccagtg tccgcgtggc ggcctacttt gaaaactttc     540
tcgcggcgtg gcggcccgtg aaagcctctg atggagatta ctacaccttg gctgtaccga     600
tgggagatgt accaatggat ggtatctctg ttgctgatat tggagcagcc gtctctagca     660
tttttaattc tccagaggaa tttttaggca aggccgtggg gctcagtgca gaagcactaa     720
caatacagca atatgctgat gttttgtcca aggctttggg gaaagaagtc cgagatgcaa     780
agattacccc ggaagctttc gagaagctgg gattccctgc agcaaaggaa atagccaata     840
tgtgtcgttt ctatgaaatg aagccagacc gagatgtcaa tctcacccac caactaaatc     900
ccaaagtcaa aagcttcagc cagtttatct cagagaacca gggagccttc aagggcatgt     960
agaaaatcag ctgttcagat aggcctctgc accacacagc ctctttcctc tctgatcctt    1020
ttcctcttta cggcacaaca ttcatgttga cagaacatgc tggaatgcaa ttgtttgcaa    1080
caccgaagga tttcctgcgg tcgcctcttc agtaggaagc actgcattgg tgataggaca    1140
cggtaatttg attcacattt aacttgctag ttagtgataa gggtggtaca actgtttggt    1200
aaaatgagaa gcctcggaac ttggagcttc tctcctacca ctaatgggag ggcagattat    1260
actgggattt ctcctgggtg agtaatttca agccctaatg ctgaaattcc cctaggcagc    1320
```

tccagttttc tcaactgcat tgcaaaattc ccagtgaact tttaagtact tttaacttaa 1380
aaaaatgaac atctttgtag agaatttttct ggggaacatg gtgttcaatg aacaagcaca 1440
agcattggaa atgctaaaat tcagttttgc ctcaagattg gaagtttatt ttctgactca 1500
ttcatgaagt catctattga gccaccattc aattattcat ctattaattc cttgatcctt 1560
catttatcca ttctgcaaac ttttcttgag caccagcacg ggtggccatt tgtggacttc 1620
tcttcattcc tatgtgtttt cttatcaaag tgatccactc tcgaaaggct cctttccagt 1680
ctgtggttgg gttcaagtca tgccagggcc agggggccca tctcctcgtt tagctctagg 1740
caaaatccag gggatctgca gtggggagcg ggggcaggaa gctggaggga aggcctgtga 1800
agggtaggga tgtggaaaga caaggtgaca gaaggaccca ataggacctt tctatatctc 1860
tggcttagca ttttctacat catattgtaa tcgtcttatt tgctagtttt cttccttact 1920
gtgagtgact aacagtcatc tttatcccag tgcctggtac ataataagtg atcaataaat 1980
gttgattgac taaaaaaaaa aaaaaaa 2007

<210> 154
<211> 2148
<212> DNA
<213> Homo sapien

<400> 154
gaattcgtcg ctgctccagg gaaagttctg ttactccact gactctcttt tttcctgata 60
acatggccag caagaaagta attacagtgt ttggagcaac aggagcttaa ggtggcttcg 120
tggccagggc aattttggag agcaaaaaat ttgcagtgag agcagtgacc agggatgtga 180
cttgaccaaa tgccctggag ctccagcgcc ttggagctga ggtggttaaa ggtgaccrga 240
atgataaagc atcggtggac agtgccttaa aaggggaagc tggtggcaga ttccgccaag 300
cacctgggtc tgaagcacgt ggtgtacagc ggcctggaga acgtcaagcg actgacggat 360
ggcaagcrgg aggtgccgca ctttgacagc aagggcgagg tggaggagta cttctggtcc 420
attggcatcc ccatgaccag tgtccgcgtg gcggcctact ttgaaaactt tctcgcggcg 480
tggcggcccg tgaaagcctc tgatggagat tactacacct tggctgtacc gatgggagat 540
gtaccaatgg atggtatctc tgttgctgat attggagcag ccgtctctag cattttraat 600
tctccagagg aatttttagg caaggccgtg gggctcagtg cagaagcact aacaatacag 660
caatatgctg atgttttgtc caaggctttg gggaaagaag tccgagatgc aaagactatc 720
tgtgctatag atgaccagaa aacagtggaa gaaggtttca tggaagacgt gggcttgagt 780
tggtccttga gggaacatga ccatgtatag acagaggagg catcaagaag gctggcctgg 840
ctaattctgg aataaacacg acaaaccaga ggcagtacgg gaaggaggca aattctggct 900
ctgcctctat ccttgattac cccggaagct ttcgagaagc tgggattccc tgcagcaaag 960
gaaatagcca atatgtgtcg tttctatgaa atgaagccag accgagatgt caatctcacc 1020
caccaactaa atcccaaagt caaaagcttc agccatttta tctcagagaa ccagggagcc 1080
ttcaagggca tgtagaaaat cagctgttca gataggcctc tgcaccacac agcctctttc 1140
ctctctgatc cttttcctct ttacggcaca acattcatgt tgacagaaca tgctggaatg 1200
caattgtttg caacaccgaa ggatttcctg cggtcgcctc ttcagtagga agcactgcat 1260
tggtgatagg acacggtaat ttgattcaca tttaacttgc tagttagtga taagggtggt 1320
acaactgttt ggtaaaatga gaagcctcgg aacttggagc ttctctccta ccactaatgg 1380
gagggcagat tatactggga tttctcctgg gtgagtaatt tcaagcccta atgctgaaat 1440
tcccctaggc agctccagtt ttctcaactg cattgcaaaa ttcccagtga acttttaagt 1500
acttttaact taaaaaaatg aacatctttg tagagaattt tctggggaac atggtgttca 1560
atgaacaagc acaagcattg gaaatgctaa aattcagttt tgcctcaaga ttggaagttt 1620
attttctgac tcattcatga agtcatctat tgagccacca ttcaattatt catctattaa 1680
ttccttgatc cttcatttat ccattctgca aacttttctt gagcaccagc acgggtggcc 1740
atttgtggac ttctcttcat tcctatgtgt tttcttatca aagtgatcca ctctcgaaag 1800
gctcctttcc agtctgtggt tgggttcaag tcatgccagg gccaggggcc ccatctcctc 1360
gtttagctct aggcaaaatc caggggatct gcagtgggga gcgggggcag gaagctggag 1920
ggaaggcctg tgaagggtag ggatgtggaa agacaaggtg acagaaggac ccaataggac 1980
ctttctatat ctctggctta gcattttcta catcatattg taatcgtctt atttgctagt 2040
tttcttcctt actgtgagtg actaacagtc atctttatcc cagtgcctgg tacataataa 2100
gtgatcaata aatgttgatt gactaaatga aaaaaaaaaa aaaaaaaa 2148

<210> 155
<211> 153
<212> PRT
<213> Homo sapien

<400> 155
Met Thr Ser Val Arg Val Ala Ala Tyr Phe Glu Asn Phe Leu Ala Ala
1 5 10 15
Trp Arg Pro Val Lys Ala Ser Asp Gly Asp Tyr Tyr Thr Leu Ala Val
20 25 30
Pro Met Gly Asp Val Pro Met Asp Gly Ile Ser Val Ala Asp Ile Gly
35 40 45
Ala Ala Val Ser Ser Ile Phe Asn Ser Pro Glu Glu Phe Leu Gly Lys
50 55 60
Ala Val Gly Leu Ser Ala Glu Ala Leu Thr Ile Gln Gln Tyr Ala Asp
65 70 75 80
Val Leu Ser Lys Ala Leu Gly Lys Glu Val Arg Asp Ala Lys Ile Thr
85 90 95
Pro Glu Ala Phe Glu Lys Leu Gly Phe Pro Ala Ala Lys Glu Ile Ala
100 105 110
Asn Met Cys Arg Phe Tyr Glu Met Lys Pro Asp Arg Asp Val Asn Leu
115 120 125
Thr His Gln Leu Asn Pro Lys Val Lys Ser Phe Ser Gln Phe Ile Ser
130 135 140
Glu Asn Gln Gly Ala Phe Lys Gly Met
145 150

<210> 156
<211> 128
<212> PRT
<213> Homo sapien

<400> 156
Met Thr Ser Val Arg Val Ala Ala Tyr Phe Glu Asn Phe Leu Ala Ala
1 5 10 15
Trp Arg Pro Val Lys Ala Ser Asp Gly Asp Tyr Tyr Thr Leu Ala Val
20 25 30
Pro Met Gly Asp Val Pro Met Asp Gly Ile Ser Val Ala Asp Ile Gly
35 40 45
Ala Ala Val Ser Ser Ile Phe Asn Ser Pro Glu Glu Phe Leu Gly Lys
50 55 60
Ala Val Gly Leu Ser Ala Glu Ala Leu Thr Ile Gln Gln Tyr Ala Asp
65 70 75 80
Val Leu Ser Lys Ala Leu Gly Lys Glu Val Arg Asp Ala Lys Thr Ile
85 90 95
Cys Ala Ile Asp Asp Gln Lys Thr Val Glu Glu Gly Phe Met Glu Asp
100 105 110
Val Gly Leu Ser Trp Ser Leu Arg Glu His Asp His Val Ala Gly Ala
115 120 125

<210> 157
<211> 424
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(424)
<223> n = A,T,C or G

<400> 157
ctgcagcccg ggggatccac tagtccagtg tggtggaatt cattggtctt tacaagactt 60
ggatacatta cagcagacat ggaaatataa ttttaaaaaa tttctctcca acctccttca 120
aattcagtca ccactgttat attacctttct ccaggaaccc tccagtgggg aaggctgcga 180
tattagattt ccttgtatgc aaagtttttg ttgaaagctg tgctcagagg aggtgagagg 240
agaggaagga gaaaactgca tcataacttt acagaattga atctagagtc ttccccgaaa 300
agcccagaaa cttctctgcn gnatctggct tgtccatctg gtctaaggtg gctgcttctt 360
ccccagccat cgagtcagtt tgtgcccatg aataatacac gacctgctat ttcccatgac 420
tgct 424

<210> 158
<211> 2099
<212> DNA
<213> Homo sapien

<400> 158
ccgcggttaa aaggcgcagc aggtgggagc cggggccttc accgaaaccc cgacgagagc 60
ccgacagccg gcggcgcccg agcccgacct gcctgcccag ccggagcgaa gggcgccgcc 120
ccgcgcagag cccgcgccag ggccgccggc cgcagagcag ttaaaacgtg caggcaccag 180
aaggcacttc ctgtcggtga agaagacctg tctccggtgt cacgggcatc ctgtgttttg 240
caaacggggc tgacctcccc tcctggggag caggaagggt cagggaagga aaagaagtac 300
agaagatctg gctaaacaat ttctgtatgg cgaaagaaaa attctaactt gtacgccctc 360
ttcatgcatc tttaattcaa tttgaatatt ccaggcgaca tcctcactga ccgagcaaag 420
attgacattc gtatcatcac tgtgcaccat tggcttctag gcactccagt ggggtaggag 480
aaggaggtct gaaaccctcg cagagggatc ttgccctcat tcttttgggtc tgaaacactg 540
gcagtcgttg gaaacaggac tcagggataa accagcgcaa tggattgggg gacgctgcac 600
actttcatcg ggggtgtcaa caaacactcc accagcatcg ggaaggtgtg gatcacagtc 660
atctttattt tccgagtcat gatcctcgtg gtggctgccc aggaagtgtg gggtgacgag 720
caagaggact tcgtctgcaa cacactgcaa ccgggatgca aaaatgtgtg ctatgaccac 780
ttttttcccgg tgtcccacat ccggctgtgg gcccctccagc tgatcttcgt ctccacccca 840
gcgctgctgg tggccatgca tgtggcctac tacaggcacg aaaccactcg caagttcagg 900
cgaggagaga agaggaatga tttcaaagac atagaggaca ttaaaaagca gaaggttcgg 960
atagaggggt cgctgtggtg gacgtacacc agcagcatct ttttccgaat catctttgaa 1020
gcagccttta tgtatgtgtt ttacttcctt tacaatgggt accacctgcc ctgggtgttg 1080
aaatgtggga ttgacccctg ccccaacctt gttgactgct ttatttctag gccaacagag 1140
aagaccgtgt ttaccatttt tatgatttct gcgtctgtga tttgcatgct gcttaacgtg 1200
gcagagttgt gctacctgct gctgaaagtg tgttttagga gatcaaagag agcacagacg 1260
caaaaaaatc accccaatca tgccctaaag gagagtaagc agaatgaaat gaatgagctg 1320
atttcagata gtggtcaaaa tgcaatcaca ggttcccaag ctaaacattt caaggtaaaa 1380
tgtagctgcg tcataaggag actttctgtct tctccagaag gcaataccaa cctgaaagtt 1440
cctttctgtag cctgaagagt ttgtaaatga ctttcataat aaatagacac ttgagttaac 1500
tttttgtagg atacttgctc cattcataca caacgtaatc aaatatgtgg tccatctctg 1560
aaaacaagag actgcttgac aaaggagcat tgcagtcact ttgacaggtt ccttttaagt 1620
ggactctctg acaaagtggg tactttctga aaatttatat aactgttgtt gataaggaac 1680
atttatccag gaattgatac gtttattagg aaaagatatt tttataggct tggatgtttt 1740
tagttctgac tttgaatttа tataaagtat ttttataatg actggtcttc cttacctgga 1800
aaaacatgcg atgttagttt tagaattaca ccacaagtat ctaaatttgg aacttacaaa 1860
gggtctatct tgtaaatatt gttttgcatt gtctgttggc aaatttgtga actgtcatga 1920
tacgcttaag gtggaaagtg ttcattgcac aatatatttt tactgctttc tgaatgtaga 1980

cggaacagtg tggaagcaga aggctttttt aactcatccg tttgccaatc attgcaaaca 2040
actgaaatgt ggatgtgatt gcctcaataa agctcgtccc cattgcttaa aaaaaaaaa 2099

<210> 159
<211> 291
<212> PRT
<213> Homo sapien

<400> 159

```
Met Asp Trp Gly Thr Leu His Thr Phe Ile Gly Gly Val Asn Lys His
 1               5                  10                  15
Ser Thr Ser Ile Gly Lys Val Trp Ile Thr Val Ile Phe Ile Phe Arg
            20                  25                  30
Val Met Ile Leu Val Val Ala Ala Gln Glu Val Trp Gly Asp Glu Gln
        35                  40                  45
Glu Asp Phe Val Cys Asn Thr Leu Gln Pro Gly Cys Lys Asn Val Cys
    50                  55                  60
Tyr Asp His Phe Phe Pro Val Ser His Ile Arg Leu Trp Ala Leu Gln
65                  70                  75                  80
Leu Ile Phe Val Ser Thr Pro Ala Leu Leu Val Ala Met His Val Ala
                85                  90                  95
Tyr Tyr Arg His Glu Thr Thr Arg Lys Phe Arg Arg Gly Glu Lys Arg
            100                 105                 110
Asn Asp Phe Lys Asp Ile Glu Asp Ile Lys Lys Gln Lys Val Arg Ile
        115                 120                 125
Glu Gly Ser Leu Trp Trp Thr Tyr Thr Ser Ser Ile Phe Phe Arg Ile
    130                 135                 140
Ile Phe Glu Ala Ala Phe Met Tyr Val Phe Tyr Phe Leu Tyr Asn Gly
145                 150                 155                 160
Tyr His Leu Pro Trp Val Leu Lys Cys Gly Ile Asp Pro Cys Pro Asn
                165                 170                 175
Leu Val Asp Cys Phe Ile Ser Arg Pro Thr Glu Lys Thr Val Phe Thr
            180                 185                 190
Ile Phe Met Ile Ser Ala Ser Val Ile Cys Met Leu Leu Asn Val Ala
        195                 200                 205
Glu Leu Cys Tyr Leu Leu Leu Lys Val Cys Phe Arg Arg Ser Lys Arg
    210                 215                 220
Ala Gln Thr Gln Lys Asn His Pro Asn His Ala Leu Lys Glu Ser Lys
225                 230                 235                 240
Gln Asn Glu Met Asn Glu Leu Ile Ser Asp Ser Gly Gln Asn Ala Ile
                245                 250                 255
Thr Gly Ser Gln Ala Lys His Phe Lys Val Lys Cys Ser Cys Val Ile
            260                 265                 270
Arg Arg Leu Leu Ser Ser Pro Glu Gly Asn Thr Asn Leu Lys Val Pro
        275                 280                 285
Ser Val Ala
    290
```

<210> 160
<211> 3951
<212> DNA
<213> Homo sapien

<400> 160

tctgcatcca tattgaaaac ctgacacaat gtatgcagca ggctcagtgt gagtgaactg 60

```
gaggcttctc tacaacatga cccaaaggag cattgcaggt cctatttgca acctgaagtt    120
tgtgactctc ctggttgcct taagttcaga actcccattc ctgggagctg gagtacagct    180
tcaagacaat gggtataatg gattgctcat tgcaattaat cctcaggtac ctgagaatca    240
gaacctcatc tcaaacatta aggaaatgat aactgaagct tcattttacc tatttaatgc    300
taccaagaga agagtatttt tcagaaatat aaagatttta atacctgcca catggaaagc    360
taataataac agcaaaataa aacaagaatc atatgaaaag gcaaatgtca tagtgactga    420
ctggtatggg gcacatggag atgatccata cacccctacaa tacagagggt gtggaaaaga    480
gggaaaatac attcatttca cacctaattt cctactgaat gataacttaa cagctggcta    540
cggatcacga ggccgagtgt ttgtccatga atgggcccac ctccgttggg gtgtgttcga    600
tgagtataac aatgacaaac ctttctacat aaatgggcaa aatcaaatta aagtgacaag    660
gtgttcatct gacatcacag gcatttttgt gtgtgaaaaa ggtccttgcc cccaagaaaa    720
ctgtattatt agtaagcttt ttaaagaagg atgcaccttt atctacaata gcacccaaaa    780
tgcaactgca tcaataatgt tcatgcaaag tttatcttct gtggttgaat tttgtaatgc    840
aagtacccac aaccaagaag caccaaacct acagaaccag atgtgcagcc tcagaagtgc    900
atgggatgta atcacagact ctgctgactt tcaccacagc tttcccatga acgggactga    960
gcttccacct cctcccacat tctcgcttgt agaggctggt gacaaagtgg tctgtttagt   1020
gctggatgtg tccagcaaga tggcagaggc tgacagactc cttcaactac aacaagccgc   1080
agaattttat ttgatgcaga ttgttgaaat tcataccttc gtgggcattg ccagtttcga   1140
cagcaaagga gagatcagag cccagctaca ccaaattaac agcaatgatg atcgaaagtt   1200
gctggtttca tatctgccca ccactgtatc agctaaaaca gacatcagca tttgttcagg   1260
gcttaagaaa ggatttgagg tggttgaaaa actgaatgga aaagcttatg gctctgtgat   1320
gatattagtg accagcggag atgataagct tcttggcaat tgcttaccca ctgtgctcag   1380
cagtggttca acaattcact ccattgccct gggttcatct gcagccccaa atctggagga   1440
attatcacgt cttacaggag gtttaaagtt ctttgttcca gatatatcaa actccaatag   1500
catgattgat gctttcagta gaatttcctc tggaactgga gacatttttc agcaacatat   1560
tcagcttgaa agtacaggtg aaaatgtcaa acctcaccat caatttgaaaa acacagtgac   1620
tgtggataat actgtgggca acgacactat gtttctagtt acgtggcagg ccagtggtcc   1680
tcctgagatt atatttatttg atcctgatgg acgaaaatac tacacaaata attttatcac   1740
caatctaact tttcggacag ctagtctttg gattccagga acagctaagc ctgggcactg   1800
gacttacacc ctgaacaata cccatcattc tctgcaagcc ctgaaagtga cagtgaccta   1860
tcgcgcctcc aactcagctg tgccccagc cactgtggaa gcctttgtgg aaagagacag   1920
ccccatttt cctcatcctg tgatgattta tgccaatgtg aaacagggat tttatcccat   1980
tcttaatgcc actgtcactg ccacagttga gccagagact ggagatcctg ttacgctgag   2040
actccttgat gatggagcag gtgctgatgt tataaaaaat gatggaattt actcgaggta   2100
ttttttctcc tttgctgcaa atggtagata tagcttgaaa gtgcatgtca atcactctcc   2160
cagcataagc accccagccc actctattcc agggagtcat gctatgtatg taccaggtta   2220
cacagcaaac ggtaatattc agatgaatgc tccaaggaaa tcagtaggca gaaatgagga   2280
ggagcgaaag tggggcttta gccgagtcag ctcaggaggc tccttttcag tgctgggagt   2340
tccagctggc ccccaccctg atgtgtttcc accatgcaaa attattgacc tggaagctgt   2400
aaaagtagaa gaggaattga ccctatcttg gacagcacct ggagaagact ttgatcaggg   2460
ccaggctaca agctatgaaa taagaatgag taaaagtcta cagaatatcc aagatgactt   2520
taacaatgct attttagtaa atacatcaaa gcgaaatcct cagcaagctg gcatcaggga   2580
gatatttacg ttctcacccc aaatttccac gaatggacct gaacatcagc caaatggaga   2640
aacacatgaa agccacagaa tttatgttgc aatacgagca atggatagga actccttaca   2700
gtctgctgta tctaacattg cccaggcgcc tctgtttatt cccccaatt ctgatcctgt   2760
acctgccaga gattatctta tattgaaagg agttttaaca gcaatgggtt tgataggaat   2820
catttgcctt attatagttg tgacacatca tactttaagc aggaaaaaga gagcagacaa   2880
gaaagagaat ggaacaaaat tattataaat aaatatccaa agtgtcttcc ttcttagata   2940
taagacccat ggccttcgac tacaaaaaca tactaacaaa gtcaaattaa catcaaaact   3000
gtattaaaat gcattgagtt tttgtacaat acagataaga tttttacatg gtagatcaac   3060
aaattctttt tgggggtaga ttagaaaacc cttacacttt ggctatgaac aaataataaa   3120
aattattctt taaagtaatg tctttaaagg caaagggaag ggtaaagtcg gaccagtgtc   3180
aaggaaagtt tgttttattg aggtggaaaa atagccccaa gcagagaaaa ggagggtagg   3240
tctgcattat aactgtctgt gtgaagcaat catttagtta ctttgattaa ttttttcttt   3300
ctccttatct gtgcagaaca ggttgcttgt ttacaactga agatcatgct atatttcata   3360
```

tatgaagccc ctaatgcaaa gctctttacc tcttgctatt ttgttatata tattacagat 3420
gaaatctcac tgctaatgct cagagatctt ttttcactgt aagaggtaac ctttaacaat 3480
atgggtatta cctttgtctc ttcataccgg ttttatgaca aaggtctatt gaatttattt 3540
gtttgtaagt ttctactccc atcaaagcag ctttttaagt tattgccttg gttattatgg 3600
atgatagtta tagcccttat aatgccttaa ctaaggaaga aaagatgtta ttctgagttt 3660
gttttaatac atatatgaac atatagtttt attcaattaa accaaagaag aggtcagcag 3720
ggagatacta acctttggaa atgattagct ggctctgttt tttggttaaa taagagtctt 3780
taatcctttc tccatcaaga gttacttacc aagggcaggg gaaggggat atagaggtcc 3840
caaggaaata aaaatcatct ttcatcttta attttactcc ttcctcttat ttttttaaaa 3900
gattatcgaa caataaaatc atttgccttt ttaattaaaa acataaaaaa a 3951

<210> 161
<211> 943
<212> PRT
<213> Homo sapien

<400> 161

```
Met Thr Gln Arg Ser Ile Ala Gly Pro Ile Cys Asn Leu Lys Phe Val
 1               5                  10                  15
Thr Leu Leu Val Ala Leu Ser Ser Glu Leu Pro Phe Leu Gly Ala Gly
            20                  25                  30
Val Gln Leu Gln Asp Asn Gly Tyr Asn Gly Leu Leu Ile Ala Ile Asn
        35                  40                  45
Pro Gln Val Pro Glu Asn Gln Asn Leu Ile Ser Asn Ile Lys Glu Met
    50                  55                  60
Ile Thr Glu Ala Ser Phe Tyr Leu Phe Asn Ala Thr Lys Arg Arg Val
65                  70                  75                  80
Phe Phe Arg Asn Ile Lys Ile Leu Ile Pro Ala Thr Trp Lys Ala Asn
                85                  90                  95
Asn Asn Ser Lys Ile Lys Gln Glu Ser Tyr Glu Lys Ala Asn Val Ile
            100                 105                 110
Val Thr Asp Trp Tyr Gly Ala His Gly Asp Asp Pro Tyr Thr Leu Gln
        115                 120                 125
Tyr Arg Gly Cys Gly Lys Glu Gly Lys Tyr Ile His Phe Thr Pro Asn
    130                 135                 140
Phe Leu Leu Asn Asp Asn Leu Thr Ala Gly Tyr Gly Ser Arg Gly Arg
145                 150                 155                 160
Val Phe Val His Glu Trp Ala His Leu Arg Trp Gly Val Phe Asp Glu
                165                 170                 175
Tyr Asn Asn Asp Lys Pro Phe Tyr Ile Asn Gly Gln Asn Gln Ile Lys
            180                 185                 190
Val Thr Arg Cys Ser Ser Asp Ile Thr Gly Ile Phe Val Cys Glu Lys
        195                 200                 205
Gly Pro Cys Pro Gln Glu Asn Cys Ile Ile Ser Lys Leu Phe Lys Glu
    210                 215                 220
Gly Cys Thr Phe Ile Tyr Asn Ser Thr Gln Asn Ala Thr Ala Ser Ile
225                 230                 235                 240
Met Phe Met Gln Ser Leu Ser Ser Val Val Glu Phe Cys Asn Ala Ser
                245                 250                 255
Thr His Asn Gln Glu Ala Pro Asn Leu Gln Asn Gln Met Cys Ser Leu
            260                 265                 270
Arg Ser Ala Trp Asp Val Ile Thr Asp Ser Ala Asp Phe His His Ser
        275                 280                 285
Phe Pro Met Asn Gly Thr Glu Leu Pro Pro Pro Pro Thr Phe Ser Leu
    290                 295                 300
```

```
Val Glu Ala Gly Asp Lys Val Val Cys Leu Val Leu Asp Val Ser Ser
305                 310                 315                 320
Lys Met Ala Glu Ala Asp Arg Leu Leu Gln Leu Gln Gln Ala Ala Glu
                325                 330                 335
Phe Tyr Leu Met Gln Ile Val Glu Ile His Thr Phe Val Gly Ile Ala
            340                 345                 350
Ser Phe Asp Ser Lys Gly Glu Ile Arg Ala Gln Leu His Gln Ile Asn
        355                 360                 365
Ser Asn Asp Asp Arg Lys Leu Leu Val Ser Tyr Leu Pro Thr Thr Val
    370                 375                 380
Ser Ala Lys Thr Asp Ile Ser Ile Cys Ser Gly Leu Lys Lys Gly Phe
385                 390                 395                 400
Glu Val Val Glu Lys Leu Asn Gly Lys Ala Tyr Gly Ser Val Met Ile
                405                 410                 415
Leu Val Thr Ser Gly Asp Asp Lys Leu Leu Gly Asn Cys Leu Pro Thr
            420                 425                 430
Val Leu Ser Ser Gly Ser Thr Ile His Ser Ile Ala Leu Gly Ser Ser
        435                 440                 445
Ala Ala Pro Asn Leu Glu Glu Leu Ser Arg Leu Thr Gly Gly Leu Lys
    450                 455                 460
Phe Phe Val Pro Asp Ile Ser Asn Ser Asn Ser Met Ile Asp Ala Phe
465                 470                 475                 480
Ser Arg Ile Ser Ser Gly Thr Gly Asp Ile Phe Gln Gln His Ile Gln
                485                 490                 495
Leu Glu Ser Thr Gly Glu Asn Val Lys Pro His His Gln Leu Lys Asn
            500                 505                 510
Thr Val Thr Val Asp Asn Thr Val Gly Asn Asp Thr Met Phe Leu Val
        515                 520                 525
Thr Trp Gln Ala Ser Gly Pro Pro Glu Ile Ile Leu Phe Asp Pro Asp
    530                 535                 540
Gly Arg Lys Tyr Tyr Thr Asn Asn Phe Ile Thr Asn Leu Thr Phe Arg
545                 550                 555                 560
Thr Ala Ser Leu Trp Ile Pro Gly Thr Ala Lys Pro Gly His Trp Thr
                565                 570                 575
Tyr Thr Leu Asn Asn Thr His His Ser Leu Gln Ala Leu Lys Val Thr
            580                 585                 590
Val Thr Ser Arg Ala Ser Asn Ser Ala Val Pro Pro Ala Thr Val Glu
        595                 600                 605
Ala Phe Val Glu Arg Asp Ser Leu His Phe Pro His Pro Val Met Ile
    610                 615                 620
Tyr Ala Asn Val Lys Gln Gly Phe Tyr Pro Ile Leu Asn Ala Thr Val
625                 630                 635                 640
Thr Ala Thr Val Glu Pro Glu Thr Gly Asp Pro Val Thr Leu Arg Leu
                645                 650                 655
Leu Asp Asp Gly Ala Gly Ala Asp Val Ile Lys Asn Asp Gly Ile Tyr
            660                 665                 670
Ser Arg Tyr Phe Phe Ser Phe Ala Ala Asn Gly Arg Tyr Ser Leu Lys
        675                 680                 685
Val His Val Asn His Ser Pro Ser Ile Ser Thr Pro Ala His Ser Ile
    690                 695                 700
Pro Gly Ser His Ala Met Tyr Val Pro Gly Tyr Thr Ala Asn Gly Asn
705                 710                 715                 720
Ile Gln Met Asn Ala Pro Arg Lys Ser Val Gly Arg Asn Glu Glu Glu
                725                 730                 735
Arg Lys Trp Gly Phe Ser Arg Val Ser Ser Gly Gly Ser Phe Ser Val
```

```
            740                 745                 750
Leu Gly Val Pro Ala Gly Pro His Pro Asp Val Phe Pro Pro Cys Lys
        755                 760                 765
Ile Ile Asp Leu Glu Ala Val Lys Val Glu Glu Leu Thr Leu Ser
    770                 775                 780
Trp Thr Ala Pro Gly Glu Asp Phe Asp Gln Gly Gln Ala Thr Ser Tyr
785                 790                 795                 800
Glu Ile Arg Met Ser Lys Ser Leu Gln Asn Ile Gln Asp Asp Phe Asn
                805                 810                 815
Asn Ala Ile Leu Val Asn Thr Ser Lys Arg Asn Pro Gln Gln Ala Gly
            820                 825                 830
Ile Arg Glu Ile Phe Thr Phe Ser Pro Gln Ile Ser Thr Asn Gly Pro
        835                 840                 845
Glu His Gln Pro Asn Gly Glu Thr His Glu Ser His Arg Ile Tyr Val
    850                 855                 860
Ala Ile Arg Ala Met Asp Arg Asn Ser Leu Gln Ser Ala Val Ser Asn
865                 870                 875                 880
Ile Ala Gln Ala Pro Leu Phe Ile Pro Pro Asn Ser Asp Pro Val Pro
                885                 890                 895
Ala Arg Asp Tyr Leu Ile Leu Lys Gly Val Leu Thr Ala Met Gly Leu
            900                 905                 910
Ile Gly Ile Ile Cys Leu Ile Ile Val Val Thr His His Thr Leu Ser
        915                 920                 925
Arg Lys Lys Arg Ala Asp Lys Lys Glu Asn Gly Thr Lys Leu Leu
    930                 935                 940
```

<210> 162
<211> 498
<212> DNA
<213> Homo sapien

<400> 162

```
tggagaacca cgtggacagc accatgaaca tgttgggcgg gggaggcagt gctggccgga      60
agcccctcaa gtcgggtatg aaggagctgg ccgtgttccg ggagaaggtc actgagcagc     120
accggcagat gggcaagggt ggcaagcatc accttggcct ggaggagccc aagaagctgc     180
gaccaccccc tgccaggact ccctgccaac aggaactgga ccaggtcctg gagcggatct     240
ccaccatgcg ccttccggat gagcggggcc ctctggagca cctctactcc ctgcacatcc     300
ccaactgtga caagcatggc ctgtacaacc tcaaacagtg gcaagatgtc tctgaacggg     360
cagcgtgggg agtgctggtg tgtgaacccc aacaccggga agctgatcca gggagccccc     420
accatccggg gggaccccga gtgtcatctc ttctacaatg agcagcagga ggctcgcggg     480
gtgcacaccc cagcggat                                                   498
```

<210> 163
<211> 1128
<212> DNA
<213> Homo sapien

<400> 163

```
gccacctggc cctcctgatc gacgacacac gcacttgaaa cttgttctca gggtgtgtgg      60
aatcaacttt ccggaagcaa ccagcccacc agaggaggtc ccgagcgcga gcggagacga     120
tgcagcggag actggttcag cagtggagcg tcgcggtgtt cctgctgagc tacgcggtgc     180
cctcctgcgg gcgctcggtg gagggtctca gccgccgcct caaaagagct gtgtctgaac     240
atcagctcct ccatgacaag gggaagtcca tccaagattt acggcgacga ttcttccttc     300
accatctgat cgcagaaatc cacacagctg aaatcagagc tacctcggag gtgtcccctg     360
actccaagcc ctctcccaac acaaagaacc accccgtccg atttgggtct gatgatgagg     420
```

gcagatacct aactcaggaa actaacaagg tggagacgta caaagagcag ccgctcaaga 480
cacctgggaa gaaaaagaaa ggcaagcccg ggaaacgcaa ggagcaggaa aagaaaaaac 540
ggcgaactcg ctctgcctgg ttagactctg gagtgactgg gagtgggcta gaaggggacc 600
acctgtctga cacctccaca acgtcgctgg agctcgattc acggaggcat tgaaattttc 660
agcagagacc ttccaaggac atattgcagg attctgtaat agtgaacata tggaaagtat 720
tagaaatatt tattgtctgt aaatactgta aatgcattgg aataaaactg tctcccccat 780
tgctctatga aactgcacat tggtcattgt gaatattttt ttttttgcca aggctaatcc 840
aattattatt atcacattta ccataattta ttttgtccat tgatgtattt attttgtaaa 900
tgtatcttgg tgctgctgaa tttctatatt ttttgtaaca taatgcactt tagatataca 960
tatcaagtat gttgataaat gacacaatga agtgtctcta ttttgtggtt gattttaatg 1020
aatgcctaaa tataattatc caaattgatt ttcctttgtg catgtaaaaa taacagtatt 1080
ttaaatttgt aaagaatgtc taataaaata taatctaatt acatcatg 1128

<210> 164
<211> 1310
<212> DNA
<213> Homo sapien

<400> 164
gggcctggtt cgcaaagaag ctgacttcag agggggaaac tttcttcttt taggaggcgg 60
ttagccctgt tccacgaacc caggagaact gctggccaga ttaattagac attgctatgg 120
gagacgtgta aacacactac ttatcattga tgcatatata aaaccatttt attttcgcta 180
ttatttcaga ggaagcgcct ctgatttgtt tctttttttcc ctttttgctc tttctggctg 240
tgtggtttgg agaaagcaca gttggagtag ccggttgcta aataagtccc gagcgcgagc 300
ggagacgatg cagcggagac tggttcagca gtggagcgtc gcggtgttcc tgctgagcta 360
cgcggtgccc tcctgcgggc gctcggtgga gggtctcagc cgccgcctca aaagagctgt 420
gtctgaacat cagctcctcc atgacaaggg gaagtccatc caagatttac ggcgacgatt 480
cttccttcac catctgatcg cagaaatcca cacagctgaa atcagagcta cctcggaggt 540
gtcccctaac tccaagccct ctcccaacac aaagaaccac cccgtccgat ttgggtctga 600
tgatgagggc agatacctaa ctcaggaaac taacaaggtg gagacgtaca aagagcagcc 660
gctcaagaca cctgggaaga aaaagaaagg caagcccggg aaacgcaagg agcaggaaaa 720
gaaaaaacgg cgaactcgct ctgcctggtt agactctgga gtgactggga gtgggctaga 780
aggggaccac ctgtctgaca cctccacaac gtcgctggag ctcgattcac ggaggcattg 840
aaattttcag cagagacctt ccaaggacat attgcaggat tctgtaatag tgaacatatg 900
gaaagtatta gaaatattta ttgtctgtaa atactgtaaa tgcattggaa taaaactgtc 960
tcccccattg ctctatgaaa ctgcacattg gtcattgtga tatttttttt ttttgccaag 1020
gctaatccaa ttattattat cacatttacc ataatttatt ttgtccattg atgtatttat 1080
tttgtaaatg tatcttggtg ctgctgaatt tctatatttt ttgtaacata atgcacttta 1140
gatatacata tcaagtatgt tgataaatga cacaatgaag tgtctctatt ttgtggttga 1200
ttttaatgaa tgcctaaata taattatcca aattgatttt cctttgtgcc cgtaaaaata 1260
acagtatttt aaatttgtaa agaatgtcta ataaaatata atctaattac 1310

<210> 165
<211> 177
<212> PRT
<213> Homo sapien

<400> 165
Met Gln Arg Arg Leu Val Gln Gln Trp Ser Val Ala Val Phe Leu Leu
1 5 10 15
Ser Tyr Ala Val Pro Ser Cys Gly Arg Ser Val Glu Gly Leu Ser Arg
20 25 30
Arg Leu Lys Arg Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly
35 40 45
Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile

```
    50                  55                  60
Ala Glu Ile His Thr Ala Glu Ile Arg Ala Thr Ser Glu Val Ser Pro
65                  70                  75                  80
Asn Ser Lys Pro Ser Pro Asn Thr Lys Asn His Pro Val Arg Phe Gly
                85                  90                  95
Ser Asp Asp Glu Gly Arg Tyr Leu Thr Gln Glu Thr Asn Lys Val Glu
            100                 105                 110
Thr Tyr Lys Glu Gln Pro Leu Lys Thr Pro Gly Lys Lys Lys Lys Gly
        115                 120                 125
Lys Pro Gly Lys Arg Lys Glu Gln Glu Lys Lys Lys Arg Arg Thr Arg
    130                 135                 140
Ser Ala Trp Leu Asp Ser Gly Val Thr Gly Ser Gly Leu Glu Gly Asp
145                 150                 155                 160
His Leu Ser Asp Thr Ser Thr Thr Ser Leu Glu Leu Asp Ser Arg Arg
                165                 170                 175
His
```

<210> 166
<211> 177
<212> PRT
<213> Homo sapien

<400> 166

```
Met Gln Arg Arg Leu Val Gln Gln Trp Ser Val Ala Val Phe Leu Leu
 1               5                  10                  15
Ser Tyr Ala Val Pro Ser Cys Gly Arg Ser Val Glu Gly Leu Ser Arg
            20                  25                  30
Arg Leu Lys Arg Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly
        35                  40                  45
Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile
    50                  55                  60
Ala Glu Ile His Thr Ala Glu Ile Arg Ala Thr Ser Glu Val Ser Pro
65                  70                  75                  80
Asn Ser Lys Pro Ser Pro Asn Thr Lys Asn His Pro Val Arg Phe Gly
                85                  90                  95
Ser Asp Asp Glu Gly Arg Tyr Leu Thr Gln Glu Thr Asn Lys Val Glu
            100                 105                 110
Thr Tyr Lys Glu Gln Pro Leu Lys Thr Pro Gly Lys Lys Lys Lys Gly
        115                 120                 125
Lys Pro Gly Lys Arg Lys Glu Gln Glu Lys Lys Lys Arg Arg Thr Arg
    130                 135                 140
Ser Ala Trp Leu Asp Ser Gly Val Thr Gly Ser Gly Leu Glu Gly Asp
145                 150                 155                 160
His Leu Ser Asp Thr Ser Thr Thr Ser Leu Glu Leu Asp Ser Arg Arg
                165                 170                 175
His
```

<210> 167
<211> 3362
<212> DNA
<213> Homo sapien

<400> 167

cacaatgtat gcagcaggct cagtgtgagt gaactggagg cttctctaca acatgaccca 60
aaggagcatt gcaggtccta tttgcaacct gaagtttgtg actctcctgg ttgccttaag 120
ttcagaactc ccattcctgg gagctggagt acagcttcaa gacaatgggt ataatggatt 180
gctcattgca attaatcctc aggtacctga gaatcagaac ctcatctcaa acattaagga 240
aatgataact gaagcttcat tttacctatt taatgctacc aagagaagag tatttttcag 300
aaatataaag attttaatac ctgccacatg gaaagctaat aataacagca aaataaaaca 360
agaatcatat gaaaaggcaa atgtcatagt gactgactgg tatggggcac atggagatga 420
tccatacacc ctacaataca gagggtgtgg aaaagaggga aaatacattc atttcacacc 480
taatttccta ctgaatgata acttaacagc tggctacgga tcacgaggcc gagtgtttgt 540
ccatgaatgg gcccacctcc gttggggtgt gttcgatgag tataacaatg acaaaccttt 600
ctacataaat gggcaaaatc aaattaaagt gacaaggtgt tcatctgaca tcacaggcat 660
ttttgtgtgt gaaaaaggtc cttgccccca agaaaactgt attattagta agcttttaa 720
agaaggatgc acctttatct acaatagcac ccaaaatgca actgcatcaa taatgttcat 780
gcaaagttta tcttctgtgg ttgaattttg taatgcaagt acccacaacc aagaagcacc 840
aaacctacag aaccagatgt gcagcctcag aagtgcatgg gatgtaatca cagactctgc 900
tgactttcac cacagctttc ccatgaacgg gactgagctt ccacctcctc ccacattctc 960
gcttgtagag gctggtgaca aagtggtctg tttagtgctg gatgtgtcca gcaagatggc 1020
agaggctgac agactccttc aactacaaca agccgcagaa ttttatttga tgcagattgt 1080
tgaaattcat accttcgtgg gcattgccag tttcgacagc aaaggagaga tcagagccca 1140
gctacaccaa attaacagca atgatgatcg aaagttgctg gtttcatatc tgcccaccac 1200
tgtatcagct aaaacagaca tcagcatttg ttcagggctt aagaaaggat ttgaggtggt 1260
tgaaaaactg aatggaaaag cttatggctc tgtgatgata ttagtgacca gcggagatga 1320
taagcttctt ggcaattgct tacccactgt gcttagcagt ggttcaacaa ttcactccat 1380
tgccctgggt tcatctgcag ccccaaatct ggaggaatta tcacgtctta caggaggttt 1440
aaagttcttt gttccagata tatcaaactc caatagcatg attgatgctt tcagtagaat 1500
ttcctctgga actggagaca ttttccagca acatattcag cttgaaagta caggtgaaaa 1560
tgtcaaacct caccatcaat tgaaaaacac agtgacttgt gataatactg tgggcaacga 1620
cactatgttt ctagttacgt ggcaggccag tggtcctcct gagattatat tatttgatcc 1680
tgatggacga aaatactaca caaataattt tatcaccaat ctaacttttc ggacagctag 1740
tctttggatt ccaggaacag ctaagcctgg gcactggact tacaccctga tgtgtttcca 1800
ccatgcaaaa ttattgacct ggaagctgta aaagtagaag aggaattgac cctatcttgg 1860
acagcacctg gagaagactt tgatcagggc caggctacaa gctatgaaat aagaatgagt 1920
aaaagtctac agaatatcca agatgacttt aacaatgcta ttttagtaaa tacatcaaag 1980
cgaaatcctc agcaagctgg catcagggag atatttacgt tctcacccca aatttccacg 2040
aatggacctg aacatcagcc aaatggagaa acacatgaaa gccacagaat ttatgttgca 2100
atacgagcaa tggataggaa ctccttacag tctgctgtat ctaacattgc ccaggcgcct 2160
ctgtttattc cccccaattc tgatcctgta cctgccagag attatcttat attgaaagga 2220
gttttaacag caatgggttt gataggaatc atttgcctta ttatagttgt gacacatcat 2280
actttaagca ggaaaaagag agcagacaag aaagagaatg gaacaaaatt attataaata 2340
aatatccaaa gtgtcttcct tcttagatat aagacccatg gccttcgact acaaaaacat 2400
actaacaaag tcaaattaac atcaaaactg tattaaaatg cattgagttt ttgtacaata 2460
cagataagat ttttacatgg tagatcaaca aattcttttt gggggtagat tagaaaaccc 2520
ttacactttg gctatgaaca aataataaaa attattcttt aaagtaatgt ctttaaaggc 2580
aaagggaagg gtaaagtcgg accagtgtca aggaaagttt gttttattga ggtggaaaaa 2640
tagccccaag cagagaaaag gagggtaggt ctgcattata actgtctgtg tgaagcaatc 2700
atttagttac tttgattaat ttttcttttc tccttatctg tgcagaacag gttgcttgtt 2760
tacaactgaa gatcatgcta tatttcatat atgaagcccc taatgcaaag ctctttacct 2820
cttgctattt tgttatatat attacagatg aaatctcact gctaatgctc agagatcttt 2880
tttcactgta agaggtaacc tttaacaata tgggtattac ctttgtctct tcataccggt 2940
tttatgacaa aggtctattg aatttatttg tttgtaagtt tctactccca tcaaagcagc 3000
tttctaagtt attgccttgg ttattatgga tgatagttat agcccttata atgccttaac 3060
taaggaagaa aagatgttat tctgagtttg ttttaataca tatatgaaca tatagtttta 3120
ttcaattaaa ccaaagaaga ggtcagcagg gagatactaa cctttggaaa tgattagctg 3180
gctctgtttt ttggttaaat aagagtcttt aatccttttt ccatcaagag ttacttacca 3240
agggcagggg aaggggggata tagaggtcac aaggaaataa aaatcatctt tcatctttaa 3300

ttttactcct tcctcttatt tttttaaaag attatcgaac aataaaatca tttgcctttt 3360
tt 3362

<210> 168
<211> 2784
<212> DNA
<213> Homo sapien

<400> 168
tctgcatcca tattgaaaac ctgacacaat gtatgcagca ggctcagtgt gagtgaactg 60
gaggcttctc tacaacatga cccaaaggag cattgcaggt cctatttgca acctgaagtt 120
tgtgactctc ctggttgcct taagttcaga actcccattc ctgggagctg gagtacagct 180
tcaagacaat gggtataatg gattgctcat tgcaattaat cctcaggtac ctgagaatca 240
gaacctcatc tcaaacatta aggaaatgat aactgaagct tcattttacc tatttaatgc 300
taccaagaga agagtatttt tcagaaatat aaagatttta atacctgcca catggaaagc 360
taataataac agcaaaataa aacaagaatc atatgaaaag gcaaatgtca tagtgactga 420
ctggtatggg gcacatggag atgatccata caccctacaa tacagagggt gtggaaaaga 480
gggaaaatac attcatttca cacctaattt cctactgaat gataacttaa cagctggcta 540
cggatcacga ggccgagtgt ttgtccatga atgggcccac ctccgttggg gtgtgttcga 600
tgagtataac aatgacaaac ctttctacat aaatgggcaa aatcaaatta aagtgacaag 660
gtgttcatct gacatcacag gcatttttgt gtgtgaaaaa ggtccttgcc cccaagaaaa 720
ctgtattatt agtaagcttt ttaaagaagg atgcaccttt atctacaata gcacccaaaa 780
tgcaactgca tcaataatgt tcatgcaaag tttatcttct gtggttgaat tttgtaatgc 840
aagtacccac aaccaagaag caccaaacct acagaaccag atgtgcagcc tcagaagtgc 900
atgggatgta atcacagact ctgctgactt tcaccacagc tttcccatga acgggactga 960
gcttccacct cctcccacat tctcgcttgt agaggctggt gacaaagtgg tcrgtttagt 1020
gctggatgtg tccagcaaga tggcagaggc tgacagactc cttcaactac aacaagccgc 1080
agaattttat ttgatgcaga ttgttgaaat tcataccttc gtgggcattg ccagtttcga 1140
cagcaaagga gagatcagag cccagctaca ccaaattaac agcaatgatg atcgaaagtt 1200
gctggtttca tatctgccca ccactgtatc agctaaaaca gacatcagca tttgttcagg 1260
gcttaagaaa ggatttgagg tggttgaaaa actgaatgga aaagcttatg gctctgtgat 1320
gatattagtg accagcggag atgataagct tcttggcaat tgcttaccca ctgtgctcag 1380
cagtggttca acaattcact ccattgccct gggttcatct gcagccccaa atctggagga 1440
attatcacgt cttacaggag gtttaaagtt ctttgttcca gatatatcaa actccaatag 1500
catgattgat gctttcagta gaatttcctc tggaactgga gacattttcc agcaacatat 1560
tcagcttgaa agtacaggtg aaaatgtcaa acctcaccat caattgaaaa acacagtgac 1620
tgtggataat actgtgggca acgacactat gtttctagtt acgtggcagg ccagtggtcc 1680
tcctgagatt atattatttg atcctgatgg acgaaaatac tacacaaata attttatcac 1740
caatctaact tttcggacag ctagtctttg gattccagga acagctaagc ctgggcactg 1800
gacttacacc ctgaacaata cccatcattc tctgcaagcc ctgaaagtga cagtgacctc 1860
tcgcgcctcc aactcagctg tgcccccagc cactgtggaa gcctttgtgg aaagagacag 1920
cctccatttt cctcatcctg tgatgattta tgccaatgtg aaacagggat tttatcccat 1980
tcttaatgcc actgtcactg ccacagttga gccagagact ggagatcctg ttacgctgag 2040
actccttgat gatggagcag gtgctgatgt tataaaaaat gatggaattt actcgaggta 2100
ttttttctcc tttgctgcaa atggtagata tagcttgaaa gtgcatgtca atcactctcc 2160
cagcataagc accccagccc actctattcc agggagtcat gctatgtatg taccaggtta 2220
cacagcaaac ggtaatattc agatgaatgc tccaaggaaa tcagtaggca gaaatgagga 2280
ggagcgaaag tggggcttta gccgagtcag ctcaggaggc tccttttcag tgctgggagt 2340
tccagctggc ccccaccctg atgtgtttcc accatgcaaa attattgacc tggaagctgt 2400
aaatagaaga ggaattgacc ctatcttgga cagcacctgg agaagacttt gatcagggcc 2460
aggctacaag ctatgaaata agaatgagta aaagtctaca gaatatccaa gatgacttta 2520
acaatgctat tttagtaaat acatcaaagc gaaatcctca gcaagctggc atcagggaga 2580
tatttacgtt ctcaccccaa atttccacga atggacctga acatcagcca aatggagaaa 2640
cacatgaaag ccacagaatt tatgttgcaa tacgagcaat ggataggaac tccttacagt 2700
ctgctgtatc taacattgcc caggcgcctc tgtttattcc cccaatttct gatcctgtac 2760

ctgccagaga ttatcttata ttga 2784

<210> 169
<211> 592
<212> PRT
<213> Homo sapien

<400> 169

```
Met Thr Gln Arg Ser Ile Ala Gly Pro Ile Cys Asn Leu Lys Phe Val
 1               5                  10                  15
Thr Leu Leu Val Ala Leu Ser Ser Glu Leu Pro Phe Leu Gly Ala Gly
            20                  25                  30
Val Gln Leu Gln Asp Asn Gly Tyr Asn Gly Leu Leu Ile Ala Ile Asn
        35                  40                  45
Pro Gln Val Pro Glu Asn Gln Asn Leu Ile Ser Asn Ile Lys Glu Met
    50                  55                  60
Ile Thr Glu Ala Ser Phe Tyr Leu Phe Asn Ala Thr Lys Arg Arg Val
65                  70                  75                  80
Phe Phe Arg Asn Ile Lys Ile Leu Ile Pro Ala Thr Trp Lys Ala Asn
                85                  90                  95
Asn Asn Ser Lys Ile Lys Gln Glu Ser Tyr Glu Lys Ala Asn Val Ile
            100                 105                 110
Val Thr Asp Trp Tyr Gly Ala His Gly Asp Asp Pro Tyr Thr Leu Gln
        115                 120                 125
Tyr Arg Gly Cys Gly Lys Glu Gly Lys Tyr Ile His Phe Thr Pro Asn
    130                 135                 140
Phe Leu Leu Asn Asp Asn Leu Thr Ala Gly Tyr Gly Ser Arg Gly Arg
145                 150                 155                 160
Val Phe Val His Glu Trp Ala His Leu Arg Trp Gly Val Phe Asp Glu
                165                 170                 175
Tyr Asn Asn Asp Lys Pro Phe Tyr Ile Asn Gly Gln Asn Gln Ile Lys
            180                 185                 190
Val Thr Arg Cys Ser Ser Asp Ile Thr Gly Ile Phe Val Cys Glu Lys
        195                 200                 205
Gly Pro Cys Pro Gln Glu Asn Cys Ile Ile Ser Lys Leu Phe Lys Glu
    210                 215                 220
Gly Cys Thr Phe Ile Tyr Asn Ser Thr Gln Asn Ala Thr Ala Ser Ile
225                 230                 235                 240
Met Phe Met Gln Ser Leu Ser Ser Val Val Glu Phe Cys Asn Ala Ser
                245                 250                 255
Thr His Asn Gln Glu Ala Pro Asn Leu Gln Asn Gln Met Cys Ser Leu
            260                 265                 270
Arg Ser Ala Trp Asp Val Ile Thr Asp Ser Ala Asp Phe His His Ser
        275                 280                 285
Phe Pro Met Asn Gly Thr Glu Leu Pro Pro Pro Pro Thr Phe Ser Leu
    290                 295                 300
Val Glu Ala Gly Asp Lys Val Val Cys Leu Val Leu Asp Val Ser Ser
305                 310                 315                 320
Lys Met Ala Glu Ala Asp Arg Leu Leu Gln Leu Gln Gln Ala Ala Glu
                325                 330                 335
Phe Tyr Leu Met Gln Ile Val Glu Ile His Thr Phe Val Gly Ile Ala
            340                 345                 350
Ser Phe Asp Ser Lys Gly Glu Ile Arg Ala Gln Leu His Gln Ile Asn
        355                 360                 365
Ser Asn Asp Asp Arg Lys Leu Leu Val Ser Tyr Leu Pro Thr Thr Val
```

```
    370                 375                 380
Ser Ala Lys Thr Asp Ile Ser Ile Cys Ser Gly Leu Lys Lys Gly Phe
385                 390                 395                 400
Glu Val Val Glu Lys Leu Asn Gly Lys Ala Tyr Gly Ser Val Met Ile
                405                 410                 415
Leu Val Thr Ser Gly Asp Asp Lys Leu Leu Gly Asn Cys Leu Pro Thr
            420                 425                 430
Val Leu Ser Ser Gly Ser Thr Ile His Ser Ile Ala Leu Gly Ser Ser
        435                 440                 445
Ala Ala Pro Asn Leu Glu Glu Leu Ser Arg Leu Thr Gly Gly Leu Lys
    450                 455                 460
Phe Phe Val Pro Asp Ile Ser Asn Ser Asn Ser Met Ile Asp Ala Phe
465                 470                 475                 480
Ser Arg Ile Ser Ser Gly Thr Gly Asp Ile Phe Gln Gln His Ile Gln
                485                 490                 495
Leu Glu Ser Thr Gly Glu Asn Val Lys Pro His His Gln Leu Lys Asn
            500                 505                 510
Thr Val Thr Val Asp Asn Thr Val Gly Asn Asp Thr Met Phe Leu Val
        515                 520                 525
Thr Trp Gln Ala Ser Gly Pro Pro Glu Ile Ile Leu Phe Asp Pro Asp
    530                 535                 540
Gly Arg Lys Tyr Tyr Thr Asn Asn Phe Ile Thr Asn Leu Thr Phe Arg
545                 550                 555                 560
Thr Ala Ser Leu Trp Ile Pro Gly Thr Ala Lys Pro Gly His Trp Thr
                565                 570                 575
Tyr Thr Leu Met Cys Phe His His Ala Lys Leu Leu Thr Trp Lys Leu
            580                 585                 590
```

<210> 170
<211> 791
<212> PRT
<213> Homo sapien

<400> 170

```
Met Thr Gln Arg Ser Ile Ala Gly Pro Ile Cys Asn Leu Lys Phe Val
 1               5                  10                  15
Thr Leu Leu Val Ala Leu Ser Ser Glu Leu Pro Phe Leu Gly Ala Gly
            20                  25                  30
Val Gln Leu Gln Asp Asn Gly Tyr Asn Gly Leu Leu Ile Ala Ile Asn
        35                  40                  45
Pro Gln Val Pro Glu Asn Gln Asn Leu Ile Ser Asn Ile Lys Glu Met
    50                  55                  60
Ile Thr Glu Ala Ser Phe Tyr Leu Phe Asn Ala Thr Lys Arg Arg Val
65                  70                  75                  80
Phe Phe Arg Asn Ile Lys Ile Leu Ile Pro Ala Thr Trp Lys Ala Asn
                85                  90                  95
Asn Asn Ser Lys Ile Lys Gln Glu Ser Tyr Glu Lys Ala Asn Val Ile
            100                 105                 110
Val Thr Asp Trp Tyr Gly Ala His Gly Asp Asp Pro Tyr Thr Leu Gln
        115                 120                 125
Tyr Arg Gly Cys Gly Lys Glu Gly Lys Tyr Ile His Phe Thr Pro Asn
    130                 135                 140
Phe Leu Leu Asn Asp Asn Leu Thr Ala Gly Tyr Gly Ser Arg Gly Arg
145                 150                 155                 160
Val Phe Val His Glu Trp Ala His Leu Arg Trp Gly Val Phe Asp Glu
```

```
                165                 170                 175
Tyr Asn Asn Asp Lys Pro Phe Tyr Ile Asn Gly Gln Asn Gln Ile Lys
            180                 185                 190
Val Thr Arg Cys Ser Ser Asp Ile Thr Gly Ile Phe Val Cys Glu Lys
        195                 200                 205
Gly Pro Cys Pro Gln Glu Asn Cys Ile Ile Ser Lys Leu Phe Lys Glu
    210                 215                 220
Gly Cys Thr Phe Ile Tyr Asn Ser Thr Gln Asn Ala Thr Ala Ser Ile
225                 230                 235                 240
Met Phe Met Gln Ser Leu Ser Ser Val Val Glu Phe Cys Asn Ala Ser
                245                 250                 255
Thr His Asn Gln Glu Ala Pro Asn Leu Gln Asn Gln Met Cys Ser Leu
            260                 265                 270
Arg Ser Ala Trp Asp Val Ile Thr Asp Ser Ala Asp Phe His His Ser
        275                 280                 285
Phe Pro Met Asn Gly Thr Glu Leu Pro Pro Pro Pro Thr Phe Ser Leu
    290                 295                 300
Val Glu Ala Gly Asp Lys Val Val Cys Leu Val Leu Asp Val Ser Ser
305                 310                 315                 320
Lys Met Ala Glu Ala Asp Arg Leu Leu Gln Leu Gln Gln Ala Ala Glu
                325                 330                 335
Phe Tyr Leu Met Gln Ile Val Glu Ile His Thr Phe Val Gly Ile Ala
            340                 345                 350
Ser Phe Asp Ser Lys Gly Glu Ile Arg Ala Gln Leu His Gln Ile Asn
        355                 360                 365
Ser Asn Asp Asp Arg Lys Leu Leu Val Ser Tyr Leu Pro Thr Thr Val
    370                 375                 380
Ser Ala Lys Thr Asp Ile Ser Ile Cys Ser Gly Leu Lys Lys Gly Phe
385                 390                 395                 400
Glu Val Val Glu Lys Leu Asn Gly Lys Ala Tyr Gly Ser Val Met Ile
                405                 410                 415
Leu Val Thr Ser Gly Asp Asp Lys Leu Leu Gly Asn Cys Leu Pro Thr
            420                 425                 430
Val Leu Ser Ser Gly Ser Thr Ile His Ser Ile Ala Leu Gly Ser Ser
        435                 440                 445
Ala Ala Pro Asn Leu Glu Glu Leu Ser Arg Leu Thr Gly Gly Leu Lys
    450                 455                 460
Phe Phe Val Pro Asp Ile Ser Asn Ser Asn Ser Met Ile Asp Ala Phe
465                 470                 475                 480
Ser Arg Ile Ser Ser Gly Thr Gly Asp Ile Phe Gln Gln His Ile Gln
                485                 490                 495
Leu Glu Ser Thr Gly Glu Asn Val Lys Pro His His Gln Leu Lys Asn
            500                 505                 510
Thr Val Thr Val Asp Asn Thr Val Gly Asn Asp Thr Met Phe Leu Val
        515                 520                 525
Thr Trp Gln Ala Ser Gly Pro Pro Glu Ile Ile Leu Phe Asp Pro Asp
    530                 535                 540
Gly Arg Lys Tyr Tyr Thr Asn Asn Phe Ile Thr Asn Leu Thr Phe Arg
545                 550                 555                 560
Thr Ala Ser Leu Trp Ile Pro Gly Thr Ala Lys Pro Gly His Trp Thr
                565                 570                 575
Tyr Thr Leu Asn Asn Thr His His Ser Leu Gln Ala Leu Lys Val Thr
            580                 585                 590
Val Thr Ser Arg Ala Ser Asn Ser Ala Val Pro Pro Ala Thr Val Glu
        595                 600                 605
```

```
Ala Phe Val Glu Arg Asp Ser Leu His Phe Pro His Pro Val Met Ile
    610                 615                 620
Tyr Ala Asn Val Lys Gln Gly Phe Tyr Pro Ile Leu Asn Ala Thr Val
625                 630                 635                 640
Thr Ala Thr Val Glu Pro Glu Thr Gly Asp Pro Val Thr Leu Arg Leu
                645                 650                 655
Leu Asp Asp Gly Ala Gly Ala Asp Val Ile Lys Asn Asp Gly Ile Tyr
            660                 665                 670
Ser Arg Tyr Phe Phe Ser Phe Ala Ala Asn Gly Arg Tyr Ser Leu Lys
        675                 680                 685
Val His Val Asn His Ser Pro Ser Ile Ser Thr Pro Ala His Ser Ile
    690                 695                 700
Pro Gly Ser His Ala Met Tyr Val Pro Gly Tyr Thr Ala Asn Gly Asn
705                 710                 715                 720
Ile Gln Met Asn Ala Pro Arg Lys Ser Val Gly Arg Asn Glu Glu Glu
                725                 730                 735
Arg Lys Trp Gly Phe Ser Arg Val Ser Ser Gly Gly Ser Phe Ser Val
            740                 745                 750
Leu Gly Val Pro Ala Gly Pro His Pro Asp Val Phe Pro Pro Cys Lys
        755                 760                 765
Ile Ile Asp Leu Glu Ala Val Asn Arg Arg Gly Ile Asp Pro Ile Leu
    770                 775                 780
Asp Ser Thr Trp Arg Arg Leu
785                 790
```

<210> 171
<211> 1491
<212> DNA
<213> Homo sapien

<400> 171

```
cctcctgcca gccaagtgaa gacatgctta cttccccttc accttccttc atgatgtggg     60
aagagtgctg caacccagcc ctagccaacg ccgcatgaga gggagtgtgc cgagggcttc    120
tgagaaggtt tctctcacat ctagaaagaa gcgcttaaga tgtggcagcc cctcttcttc    180
aagtggctct tgtcctgttg ccctgggagt tctcaaattg ctgcagcagc ctccacccag    240
cctgaggatg acatcaatac acagaggaag aagagtcagg aaaagatgag agaagttaca    300
gactctcctg ggcgaccccg agagcttacc attcctcaga cttcttcaca tggtgctaac    360
agatttgttc ctaaaagtaa agctctagag gccgtcaaat tggcaataga agccgggttc    420
caccatattg attctgcaca tgtttacaat aatgaggagc aggttggact ggccatccga    480
agcaagattg cagatggcag tgtgaagaga gaagacatat tctacacttc aaagctttgg    540
agcaattccc atcgaccaga gttggtccga ccagccttgg aaaggtcact gaaaaatctt    600
caattggact atgttgacct ctatcttatt cattttccag tgtctgtaaa gccaggtgag    660
gaagtgatcc caaaagatga aaatggaaaa atactatttg acacagtgga tctctgtgcc    720
acatgggagg ccatggagaa gtgtaaagat gcaggattgg ccaagtccat cggggtgtcc    780
aacttcaacc acaggctgct ggagatgatc ctcaacaagc cagggctcaa gtacaagcct    840
gtctgcaacc aggtggaatg tcatccttac ttcaaccaga gaaaactgct ggatttctgc    900
aagtcaaaag acattgttct ggttgcctat agtgctctgg gatcccatcg agaagaacca    960
tgggtggacc cgaactcccc ggtgctcttg gaggacccag tcctttgtgc cttggcaaaa   1020
aagcacaagc gaaccccagc cctgattgcc ctgcgctacc agctgcagcg tggggttgtg   1080
gtcctggcca agagctacaa tgagcagcgc atcagacaga acgtgcaggt gtttgaattc   1140
cagttgactt cagaggagat gaaagccata gatggcctaa acagaaatgt gcgatatttg   1200
acccttgata tttttgctgg ccccctctaat tatccatttt ctgatgaata ttaacatgga   1260
gggcattgca tgaggtctgc cagaaggccc tgcgtgtgga tggtgacaca gaggatggct   1320
ctatgctggt gactggacac atcgcctctg gttaaatctc tcctgcttgg cgacttcagt   1380
aagctacagc taagcccatc ggccggaaaa gaaagacaat aattttgttt ttcattttga   1440
```

aaaaattaaa tgctctctcc taaagattct tcacctaaaa aaaaaaaaaa a 1491

<210> 172
<211> 364
<212> PRT
<213> Homo sapien

<400> 172

```
Met Trp Gln Pro Leu Phe Phe Lys Trp Leu Leu Ser Cys Cys Pro Gly
 1               5                  10                  15
Ser Ser Gln Ile Ala Ala Ala Ala Ser Thr Gln Pro Glu Asp Asp Ile
            20                  25                  30
Asn Thr Gln Arg Lys Lys Ser Gln Glu Lys Met Arg Glu Val Thr Asp
        35                  40                  45
Ser Pro Gly Arg Pro Arg Glu Leu Thr Ile Pro Gln Thr Ser Ser His
    50                  55                  60
Gly Ala Asn Arg Phe Val Pro Lys Ser Lys Ala Leu Glu Ala Val Lys
65                  70                  75                  80
Leu Ala Ile Glu Ala Gly Phe His His Ile Asp Ser Ala His Val Tyr
                85                  90                  95
Asn Asn Glu Glu Gln Val Gly Leu Ala Ile Arg Ser Lys Ile Ala Asp
            100                 105                 110
Gly Ser Val Lys Arg Glu Asp Ile Phe Tyr Thr Ser Lys Leu Trp Ser
        115                 120                 125
Asn Ser His Arg Pro Glu Leu Val Arg Pro Ala Leu Glu Arg Ser Leu
    130                 135                 140
Lys Asn Leu Gln Leu Asp Tyr Val Asp Leu Tyr Leu Ile His Phe Pro
145                 150                 155                 160
Val Ser Val Lys Pro Gly Glu Glu Val Ile Pro Lys Asp Glu Asn Gly
                165                 170                 175
Lys Ile Leu Phe Asp Thr Val Asp Leu Cys Ala Thr Trp Glu Ala Met
            180                 185                 190
Glu Lys Cys Lys Asp Ala Gly Leu Ala Lys Ser Ile Gly Val Ser Asn
        195                 200                 205
Phe Asn His Arg Leu Leu Glu Met Ile Leu Asn Lys Pro Gly Leu Lys
    210                 215                 220
Tyr Lys Pro Val Cys Asn Gln Val Glu Cys His Pro Tyr Phe Asn Gln
225                 230                 235                 240
Arg Lys Leu Leu Asp Phe Cys Lys Ser Lys Asp Ile Val Leu Val Ala
                245                 250                 255
Tyr Ser Ala Leu Gly Ser His Arg Glu Glu Pro Trp Val Asp Pro Asn
            260                 265                 270
Ser Pro Val Leu Leu Glu Asp Pro Val Leu Cys Ala Leu Ala Lys Lys
        275                 280                 285
His Lys Arg Thr Pro Ala Leu Ile Ala Leu Arg Tyr Gln Leu Gln Arg
    290                 295                 300
Gly Val Val Val Leu Ala Lys Ser Tyr Asn Glu Gln Arg Ile Arg Gln
305                 310                 315                 320
Asn Val Gln Val Phe Glu Phe Gln Leu Thr Ser Glu Glu Met Lys Ala
                325                 330                 335
Ile Asp Gly Leu Asn Arg Asn Val Arg Tyr Leu Thr Leu Asp Ile Phe
            340                 345                 350
Ala Gly Pro Pro Asn Tyr Pro Phe Ser Asp Glu Tyr
        355                 360
```