



NLRC4 (NC_000002.11, GRCh37) - gDNA - 2026-03-14

agtttatgca aagacagagg aaagagtatg caagaatgtc atcctcaagg 32490906
gaagtgcaga gagatttctt cagtcctcag ctgagtataa gctggcctcc 32490856
tggagtctgt gaacacaaac gtccaatgtg agtgtgcctg tgcaagcccc 32490806
tggctgttta tactccggag ggtgtccccg tgcgtcatcg gtggagtgga 32490756
ccaaaactgg tgatctgttt gccctgtgtg accttgccca gaacctgtct 32490706
gactgagaga acacatctgc tggaagtctt ctgggattca aggtacaggg 32490656
gtaagcatga ccttgaatgc agtagcaatg tgctttagcc aactaagctg 32490606
gctcatttca tttaccgctc tatctcccat ggttaagcat taaaaataca 32490556
tgttgtggct gggcatgggtg gctcacgcct gtaatcccag cactttggga 32490506
ggctgaggct ggagattgc ctgaggtcag gagttcgaga ccagcctggc 32490456
caacatgggtg aaattctgtc tctactaaaa atacaaaaat tagccgggca 32490406
tggtggtgca cgctgtagt cttagctact gggaggactg aggcggggagg 32490356
aacgcttgaa cccgggaggc agaggttgca gtgagctgag attgtgccac 32490306
tgccctccag cttgggtgac agaacaagac tctgtctcaa aaaaaagaaa 32490256
aaagaaagaa aaagaaaaaa aatatatggt ggatgttcag aagactttgt 32490206
ttcattttaa ggtatagaat aagtaactca acagcaatga attcatatgt 32490156
tgtgaacaaa caggaaacaa atgagtaatt cctttcttga cgggaatttct 32490106
agctcttgca tcttttactc tgaagttcta cttcttcccc ggctactcct 32490056
gcctacacc c atcttccctt tctgaactgg tagtacttgt gtccaaacca 32490006
ctcttactgt gctttgaaaa aaaaaaagg aactgctcag cagttccct 32489956
CTCTGTACAC TGTCCTCTCA CAGAACAAGA AGGTATCTGG TCTACAAGAA 32489906
CTCGAGGCCT CACTGAAACG GAAAGCAAAT ACAAAGAAAC TTTATTTTAA 32489856

AAACATGTCT TGGTCTCCCA AGAAGAGGGC AATTGGATTG CTCAGCCAGg 32489806
tactgtgggt agagagaatg ggatttttaa ggtctggggc ccaaatatta 32489756
aaatctgggt ttacattcat ttaaagcttg tgtctgggat gtacaaaagc 32489706
cttaacattg acgagtgtga tttgcatgcc tggctggatt tgcctgccga 32489656
gaaaccttta ggggtgggta atcgggtctg ctggggcttc atcaggttca 32489606
aggggtacat gtacccttg gactactgtg agatggaaaag gactttgaa 32489556
acactttttg gcattacaga aaggaaactc actctttttt tttttttttt 32489506
tttgagacag agtcttgctc tgcacccag gctggactgc agtggcgtga 32489456
tctcggctca ctgcaacctc tgcctcctgg gttcaagcaa ttctcctgcc 32489406
tcagcctccc aagtagctgg gattacaggc acccggcacc gcgccccagc 32489356
taatttttgt atttttagta gagacaggtt ttcacatgt tggccagact 32489306
ggtctcaact cctgacctcg tgatctgccc acctcagcct cccaaagtgc 32489256
tgggattaca ggtgtgagcc aacgtgcccg gccaggaaac tcaactttgt 32489206
tgctaagact gttgttagaa tcacagatga tcaaagctga aaggaacgag 32489156
gtggactact tagtccatcc aatctcccaa gttactgatg agaaacctga 32489106
tatttgagaga cagaagtga ggaaatcacc ctttacggga cacctatttc 32489056
gtgatagggc ctttatgtac attatctcag tagatccttg cagcctggct 32489006
ttgagaggtg gaaaatgtgg tagagaggag ttaaagtcc tgcctacat 32488956
cacactgcta attgtctaca aaactaggat agaacctggt cagcacactt 32488906
cttaactggt cacacacttt tataatatta gtcgtattaa tgtgtttaa 32488856
atacataga ctgggtggct taaacaacag aaatttatat tcccacagtt 32488806
ctggaggctg caagtccaag accaaggtgt cagcagggtt ggcttctccc 32488756
cacgcctccc tccttggcct tttctctctg tatgcacatt cctggtatct 32488706
ccctttgtgt gtcccgattt cctcttctca taacagcctc atttgagctt 32488656
aatgacctct ttaaaggctc tgtctgcaaa tacagtcaca ttctgaggtt 32488606
cagggcttca acataggat ttgggggaag cccagttcag cacataacac 32488556
taatattaac atgtgagatt gctgaagcct attaaagacc taagaacatt 32488506
ctagtctaga gcctttttac tagaaaggaa gacagataat acccactgac 32488456

catctttgtc acaactactt tcatgtttaa tcttcacaat agtccagggg 32488406
ggtgaatatt atgcatgatt tggaaagcaa gattcggaaa ggctaagtaa 32488356
catgtctagg gatacttacc tcataagggtg cagagtgagg atttgaattc 32488306
agatctgcaa tgccaaagcc cacacacatt ttccatttct gtgtgcttcc 32488256
tgtctgctcc taattatatg tactctttcc cttattttat ctgtgagggtg 32488206
tgggaatgac cccatagacg tgggttatat ggggccagag aaacttcagt 32488156
tctctgagga gctcatgtaa ccttttttaa gaaaatgcca attttagaat 32488106
tagtactaaa tattattttc cagctgggca tgggtggctta tgcctgtaat 32488056
cccagcactt tgggaggccg aggcaggcag attgcctata tatatataat 32488006
atatattatt atattatfff ccaatgtaca aatgtggggg aaggacttct 32487956
tccaccaat tcagttattc actggacagc ttgcggggag gggttgcagg 32487906
gccatagcta cattccaaga gagtacactg gtctcagtcc tattcttttt 32487856
tttttttgtc tgagacagag tctctctctg tcaccaggc tggagtgcaa 32487806
tggtgctatc ttggctcact gaaacctcca cctcctgggt tcaagaaact 32487756
ctcctgtccc agcttcccaa gtagctggga ttacagggtg gcacctccac 32487706
gcctggctaa tttcttgtag ttttagcaga gatgggggtt caccatgttg 32487656
gccaggctgg tctcaaactc ctgacttcag gtgatccacc ctctcagtc 32487606
tccccaagca ctgggattac aagcgtgaac caccacgcct ggtccacagc 32487556
cctattcttt atgccagtgg gtaactgaga aaaattacat gatcttcagt 32487506
atatggattg attttgttct tgagagcaat taaaaacttt atacatctta 32487456
gctccttctt ctatcttctt cctctttttc tactctgact taaactttga 32487406
cccagtcagg gatgggtgta ttcttcccaa acccaccctt ttttggggaa 32487356
gtagaaaggg agagaagaat ctacagttgc cgccattcac tgagtccttc 32487306
ctgtgtgcca gtcattacc cttgattgag gactcttagt gtgtcagtgg 32487256
tagagctgta gtttgaacgc aatcctgaca ccaaaatgtg cccttgctta 32487206
agctcctgag ctgccccaat ttcttttctt ttcttttctt ctttttttct 32487156
tttttttgac ccagagtctc gctctgtcac caggctggag tgcagtggcg 32487106
caatctcggc tcaactgcaac ctccgcctcc ctggttcaag tgattctcct 32487056

gcctcagcct cccgagtagc tgggagtaca ggcgccctgcc accacgcctg 32487006
gctaattcctt gtatTTTTtag tagagacggg gtttcacccat gttggccagg 32486956
atggtctcga tctcttgacc tcgtgatcca cctgcctcag cctcccaaag 32486906
tgctaggatt acaggcgtga gccaccgcgc ctggctgctc caatttcaat 32486856
gacaattttt tatattgtta atgaatcagt tttaacataa aagggaact 32486806
ttattttctg aaaatagata tgcttttgaa gcagcatcat tggggtaaact 32486756
acctgatggt cgttgtctca cgccaaagga atcgaggaca cagacacaca 32486706
agaagtgagt ttgagagtgg agttttaggc cgggcatggt ggctcacgcc 32486656
tgtaatccca gcactttggg aggccgaggc aggcagatca caagatcagg 32486606
aggttgagac catcctggcc aacatggtga aaccccatct ctactaaaaa 32486556
tacaaaaatt agctgggtga ggaggcatgc acctgtaatc ccagctactc 32486506
gggaggctga ggaggagaa tcgcttgaac ccagatggca gaggttgag 32486456
tgagctgagg tcgcaccact gcactccagc ctggctacag agcgaggctc 32486406
catctcaaaa aaaaacaaaa ggggggaggc ttaataggcg aaagaaagag 32486356
aaaagagaat agctctctct cctgcagaga gagaggggaa cctgagtgag 32486306
tggttttgtg gtgaaataca tgggtgttgtt gttgttgttg ttttcagatg 32486256
gagtctcgct ctgtcgcca ggctggagtg cagtgctgcg atctcggctc 32486206
actgcaagct ccgcccccg ggttcacgcc attctcctgc ctcagcctcc 32486156
cgattagctg ggactacagg cgcccaccac cacgcctggc taaatttttg 32486106
aatTTTTtag tagagacagg gtttcacctt gttagccagg atggtctcga 32486056
tctcctgact ttgtgatccg cctgcctcag cctcccaaag tgctgggatt 32486006
acaggcgtga gccactgcac ccagccaatg catggggttt tatagatgaa 32485956
cttgagaagg tgggtgtctga tatacatagg gactgagaga ttggtcagaa 32485906
ccggtataac gtttgcatag cgcacgaaga agccggccat tccaccctta 32485856
tgTTTTatta tgcatgagg gtctctatct ggccggcact atgttgtctg 32485806
ttcctactgt acacatggtt gaaaaagaaa agggaagatg gatccgcat 32485756
gttgaatatg cctggcccc aggtggcttt tttctatggg cacagctact 32485706
ggcatttacc aatgcaagct ttagcttat ctatacttgc agcttgattt 32485656

ttcaggctgc tttttattag aaaagatatg atttgggggc tttttgaatg 32485606
aaagggaaact ttatctagga ctttcttata ctcacttata actctcacia 32485556
cagcaacatt cacagcaaac ttgccatggc tgtgagcatc tagtttaagc 32485506
tgaggagatc cttattcaaa gagcttgtga aattagaaag atcagagtca 32485456
aagtaagcta ttcttagaga agtttttgtg ggggaaggacc cccttgta 32485406
aaagtattca ttgttctgta tttatgatag cccaatctg aaaacaaccc 32485356
aatccatcaa caggagaata gataaataaa ctctagtttt ttttttttcg 32485306
ttgttttttt tttttttttt tttgtcgttg ccaggctgg agtgtggtgg 32485256
cacgatcttg gctcactgca acctccgctt cctgggttca agtgattctc 32485206
ctgcctcagc ctccaagta gctggaatta caggcatgag ccacatgcc 32485156
cgggtaattt ttgtattttt agtagagaca gggtttcgcc atgttggcca 32485106
ggctggtcct gaactcctga cctcaggtga tccgccacc tcggcctccc 32485056
aatatgctgg gattacaggc gtgagccacc gtgcccgcc aatacactct 32485006
agtattttat acagtacaat actactaagc aatgaaatgt tacaactac 32484956
ttatactgca agcaacagca tgagtactt acacagacat tgtgtggaat 32484906
gaaaggagta gcacatactg tatgattccg tttatgtgaa gttcttcaac 32484856
aggctaattt acggtttaaa aaaatcagaa gagtgatttt ctttgagggt 32484806
gtggcagaga tggaatttga ctgggaaggg gcataggata ctaaggagag 32484756
ggtaatgttt tctgtcttga taggtgtttg aggtagaagc atttttcagc 32484706
tcatcaaagg gtacagttaa gatctctgct ttcactgtag gtgaattttt 32484656
cctaagaaag aataataaac caatattgaa ttctagttaa ttatatgaac 32484606
atagaagtgt actaacgtct gcaacttaca ttgaatatgc aagaaaataa 32484556
gtaaaataga ttgataaatg aatagagggg tggattttct ctatgtttga 32484506
aaatgttcat aataaaatgt tagggtaatg gccagacgcg gtggctcatt 32484456
cttgtgatct cagcattttg ggagactgag gcagacagat cacttttagcc 32484406
caggagtttg agaccagcct gggcaacacg gcaaaactct gtctctaaaa 32484356
aaaaaaaaa aaaaaaaaaa aaaattagcc aggcattggtg gcacacacct 32484306
gcggtcccag ttactcagga ggctgaggtg ggaagatcac ctgagcccag 32484256

aaggттаagg atgccgtgag ccatgatggg gccactgcac tccaacctgg 32484206
gtgacagagt gagaccctgt ctcaaaaaaa gagttttaat gttaggataa 32484156
catgagttcc catgcccaacc ccatccacat gagttcccaa gccaaactcca 32484106
ttcacatacc acaatcacac tcacatagct cccattttgt ttctctccac 32484056
ccagtgattc tagttctctt ccccacttcc tgtctgccct ctcatgctgt 32484006
ctttaattca gactttgcat cttcatcctg atgcaggggg tcgtgtatgt 32483956
gtgtatgagg agccggggta gatcatctaa cttggtttgg gaatgcacac 32483906
agagcagtct cagaggcttc tgggccctg cttttcagag tgtgtggagg 32483856
aggaagggag aaaggaagt gcttttaaag caactaggag gatgaaatga 32483806
caggaccata ccaggaaatt gaaatccgtt tcttatctta aaacatcact 32483756
ttaaacatac tccttatacc ataatctctc ccagttgctc ataggataaa 32483706
gaacaaatgc ctcatcttgg cgtacaaggc tttccatagc tttcccctt 32483656
tgtaccctgg aagcataact ctttttttct gtctcctcaa ttactcatat 32483606
tgatagggaa ggggggaagg gaagtgtgag gaagagaagg gcgctccct 32483556
ggcaagggct ccacccccag gcctgtgccc acggacctag gtgaggacag 32483506
gcactcctgc cttggcgccc aaatgttgca tttcccaagg ccaccctggc 32483456
ctgccacacc gtcacctat gcttataaaa atcccagaga cccttgacag 32483406
cagacacaca agcggctgga cgtcgagagg aacacatcgg cggaagaaca 32483356
tacaagcagc tggacgtcca gaggacgttg aagggagaat gctggcgga 32483306
gagcacacaa cagacatcgg cacgccagca ggccatccac cagaggaacg 32483256
actcggagtt tggcctggag ggttgagaa gagttggtgg cggcttact 32483206
ccggggaaaa accatctccc ttctggctac cccatctgct gagagcttct 32483156
tccactcaat gaaaccttgc gctcattctc caagaccacg tgtgatccaa 32483106
ttcctccggt acaccaaggc aagaaccccg gaatacagaa agccctctgt 32483056
ccttgcaata aggcaggggt cccattgagc taatacaaga cgcctacgga 32483006
cagctgaact aaaagagcac cctgtaacac acaccactg gggcttcag 32482956
agctgtaaac attcaccact agacactgcc gtgggattgg aacccacag 32482906
cccgccatc tgtatgatcc cctagagtc tgagcagcg gcactgaaga 32482856

agtgagccac acccccatcg caagccctgc gaaggggaca agagaacttt 32482806
tcccctttcc atactccctg atctcatcct ctcacctgca aggcgtttta 32482756
catcctcatc tccacctcca ccccagccca actacctggc ctcatcttac 32482706
ttatcctttt tttttttttt ttttctttt gaggcagagt ctcgctctgt 32482656
ctgccaggct gggatgcagt ggcacgatct cggctcactg caacctccgt 32482606
ctcccgggct caagtgactc tcctgcctca gcctccgaa cagctgggac 32482556
tacaggcgtg tgccaccacg ccccgcta at tttgtat ttaatagaga 32482506
caggattcac catgttggtc aggctggtct cgaactcctt acctcacgtg 32482456
atccgcctgc ctccggcctcc caaagtgttg ggattacagg cgtgagccac 32482406
cgcgcccagc cctacttata ctttaagacc tggttcatgt gctgtctcct 32482356
ccatgaaaac ttcctccctg gatgattcca gtccatatac tctttcctgg 32482306
aaatactgga gagaacgtac cctctgcacc attcatgttg acaactatac 32482256
cgtcttttga catttaattc catgttgctt tcttggctct gaacagcaga 32482206
aatgagaaga aactttgaag agaagggcaa agttccagct gaacatagtt 32482156
tagagctcta ggcaaggagt ccagccgcct gggttctctt tagggcctgg 32482106
ccatgaatag ccaggggctt tgagcgagtt ttttctggt ttgggtcacc 32482056
atcttctcat ctatgaaaag cggggcatta cctagataat tgcacagcc 32482006
cctccacctg atagtctctg gttctgtttt gtttgtttta cagAATGAAG 32481956
AGTAGTTTTA CAGAAAAAAG AGGACAATAT TGGGATCACC TTTGACCTTT 32481906
CCATTTGGAA ATAATATTTT CTATTGTGTT ATAGAAAGGT GGAAGCTTT 32481856
CATCCAGAAC AAgtaagtat atgagaaata acatctgcct ggttatacag 32481806
tctgctacca aatactggtg attttaa atg gaaaatcagt tcatggcttc 32481756
ctctgaccag tcatatgttg aattaccaat aatattctt ctgttgtttt 32481706
aggaattcag ttacaaatat ggtaacctgt gataaaaggc agaaccacag 32481656
ataggatagg acttacacaa agagtgacca ggtgtatggt ttaaactggt 32481606
agttctcatc acctgttcag ccagacagca gagagctata catgtcaagc 32481556
tcattgtgaa gaaacatggt atagatctaa gtggcaacca aatgtagct 32481506
cctccactt taaatggctg ggtgtagacc tgcactatct agtatattaa 32481456

tagtagccac tagccctctg tagctattta aaggtgaatt taaataaaaat 32481406
aaaatgtaaa cttcagttgc acagtcactg tagccagatt tcaagcactc 32481356
agtagtcaca tgtggctaata gactaccata ttgtataatg cagatataga 32481306
acatgttcat tatcacagaa agttctattg aaaagcattg gtctagacaa 32481256
agagatattc tgaaaagaat gaataattaa tgaataaatg agcagcattt 32481206
tttccaccta attacttgat aaggaaggag tatgatggtc tacatacaag 32481156
gagatataac atagtaaaaat aatatcttac tgtttatata tatatTTTTT 32481106
tttgtaaatt tttttttttg tgtgagatgg agtctcgctc tntagcccag 32481056
gctggagtgc agtgggtgtga tcttggctca ctgcaacctc cacctcctgg 32481006
gttcaagcga tgcttctgcc tcagcctcct gagtagctgg gaccacaggc 32480956
gcgtgccacc atgccagct aattttttgt attttttagta gagacgaggt 32480906
ttcaccatat tagccaggat gatctcgatc tcctgacctc gtgatccacc 32480856
cgcctcggcc tcccaaaatg ctgggattac aggtgtgagc caccacgcct 32480806
agccactttt ccaattttta gacatttttg ggtatgagag ttatgtgact 32480756
tattcaatat aatgagtctt ttaaataatt agagtatttt aaataacgtg 32480706
tcttcatttt ataggtgaag aaaggtagtc tcaggaaggc taggctgtga 32480656
acttgtgtgt gtgtgggtct ctaagccttt ctgaggctgt atttcttatt 32480606
tttttttttt ttttttgaga cggagttttg ctcttgttgc ccaggctgga 32480556
gtgcaatggc gccatctggg ctaccgcaa cctctgcttc ccaggttcaa 32480506
gtgattcgcc tgcctcagcc tcccagtag ctgggattac aggcatgtgc 32480456
caccacgact ggctaatttt gtatttttag tagagacagg gtttctccat 32480406
gttggtcagg ctagtctcga actccccgacc tcagataatc cccccacctc 32480356
agccttccaa agtgctggga ttacaggtgt gagccactgc gcccgggtga 32480306
ggctgtattt ctttagctct aaactgaaga tcacaatggg acacagactt 32480256
agaggttact tccatagggg tgatgtggaa gctagagAAC agatgagacc 32480206
ccagaaggag agagatggga ctcttgCagg acatgtagac agggAatatt 32480156
ctagctgagg tcagcagcag agctctgcaa tggtgagaaa ggacggctgg 32480106
ggtggggtcc tgggtgcttg agtgattgat ggtgcatttc aggcCagaga 32480056

ggttctgggg tctttgagag gagtgcattc cctctctgat cagtcaacac 32480006
aggtttgaaa gccaggagcg gccagggtgcg gtggctcatg cctgtaatcc 32479956
tagcactttg ggaagctgag acgggcagat cacctgaggt cgggagttcg 32479906
agaccagcct gaccaacata gagaaatctc atctctacta aaaatacaaaa 32479856
attagctggg tgtgggtggcg catgcctgta atcccagctg cttgggagggc 32479806
cgaggcaggg gaattgcttg aacctggcag gcagaggttg tggtagctg 32479756
agatcgcgcc attgcactcc agcctgggca gcaacagtga aacttcgtct 32479706
gaaaaaaaa aaaaaaaaa aaaccaggag cagcctagcc caggaagaaa 32479656
tctagtgcag acggtgtctg agagttaaaa accaggaaga catttctcca 32479606
agctgtcaca aacatagcgt gggtagctg cctgggtacg gtgtggtcta 32479556
cgtttcagaa ttagaccttg cagagtcaga cacaaaaagg acacagctac 32479506
cctcaagacc tggcgagaga gcttacattg gataaaaacc agtgttttga 32479456
tgtgatactc ttcagaaaag accaaagtct gtggagatac aatgtgctct 32479406
ttgtctgggtg acacctgaat aaaggctaaa aatagtagct aacatatatt 32479356
gagttattac tttgtatgag atactataca tgaattattg taacaacttc 32479306
ctaagttaaa taatgctctt gacaccattg tacagatgag gaatccccag 32479256
tgtgctggag ctggttgtta ctgtgatgtg aaacctgatt attgaatttt 32479206
caggattttt gttagccagt taacatacgc tgtagcttg aaataggcca 32479156
tggtaggaat atttatacct tggggattgg tgaatgctac aaattagggc 32479106
ctttactccc agagggccag ggccagtttg tgaaacattt agcagcacgt 32479056
actttttttt tttttttttt ttgagacaga gttttgctct tgttgcccag 32479006
gctggagtgc aatggcacca tctcggctca ccgcaacctc cacctcccag 32478956
gttcaagcga ttctcctgcc tcagcctcct gagtagctgc cactacaggc 32478906
atgcaccacc acacctggct aattttgcat ttttagtaga gacaaggttt 32478856
ctccatgttg gtcaggctgg tctcgaactc ccgacctctg gtgatccgcc 32478806
cgccttggcc tcccaaagtg ctggggttac aggtgtgagc caccgcaccc 32478756
ggccagcagc acgtaattga aatagactca aagaggctta gtgacttgcc 32478706
aaggtcacat agatggtagc aagtggcaga tcctaggcca ttgccattat 32478656

tctaaagcca acggtcttac aactacaacc tcaactgggga ctgctttata 32478606
tcagagggac aagataactc accttacttc ttcaccaaag caaaacatct 32478556
tgctcatcaa taactctggg gttagaaatg ctttgacagag gccgggcacg 32478506
gtggctcacg cctgtaatcc cagcactttg ggaagccaag gcaggtggat 32478456
cacaaggcca ggagtctgag accagtctga ccaaaatggt gaaacccccgt 32478406
ctctacaaat aatagaaaaa ttagctgagt gtggtggtgc gtgcctgtaa 32478356
tcccagctac tcaggaggcg gaggcaggag aattgcttga acccaggagg 32478306
cagagcttgc agtgagccga gatcgcgtca ctgcactcca gcctgggtga 32478256
cacagcaaga ctccgtctca gaaaaaaaaat gcttggcaga gcatttcttg 32478206
aaggcctgga attcaggcat ttggcatctc cataactcag gagatgctca 32478156
caggaaaaaa atgcatggcc ctaatgctct ggagacagat gctgatatgc 32478106
atatttaatt tttttttttt agacggagtc tcgctctttc gcccaggccg 32478056
gagtgcagtg gcgctatctc agctcactgc aagctccgcc tcctgggttc 32478006
acgccattct cctgcctcag cctcccaagt agctgggact acaggcgccc 32477956
gccaccacgc ccggctaatt ttttgatatt ttagtagaga cagggtttca 32477906
ctgtgttagc caggatggtc tcgatctcct gacctcgtga tctgccccgc 32477856
tcggcctccc aaagtgctgg gattacaggc gtgagccacc gtgcccagcc 32477806
ggatatgcac attttatata agtaaataaa tatgtatatt tctccccatc 32477756
tcctcagTGA ATTTCAATAA GGACAATAGC CGAGCCCTTA TTCAAAGAAT 32477706
GGGAATGACT GTTATAAAGC AAATCACAGA TGACCTATTT GTATGGAATG 32477656 N31H
TTCTGAATCG CGAAGAAGTA AACATCATTT GCTGCGAGAA GGTGGAGCAG 32477606
GATGCTGCTA GAGGGATCAT TCACATGATT TTGAAAAAGG GTTCAGAGTC 32477556 E64Rfs*4
CTGTAACCTC TTTCTTAAAT CCCTTAAGGA GTGGAACAT CCTCTATTTT 32477506 L70F
AGGACTTGAA TGGACAAAgt aagtatcagt tagttttgca tctgtttctg 32477456
caagtagaat agaccacaac aaagatccat cttccccatg gcagagcctc 32477406
tgcttttctt tctcttcata tcacctggca gtggcctttg atacctgcta 32477356
aggaaaagct tagatgattt taggaaaaac tcatagtaga tcaattgatg 32477306
gtgaagccaa acaaataacc ccaaggccag gaaataaatg attgagtatt 32477256

gtctcactgc aagataaaac tggagaataa gtgcactagt taagcttcca 32477206
gtgcagcagc ggttctcagc attccctggt tggatgagat ctacctatgg 32477156
gagagaggcc cagctgacta cctactccat gtccaggcct cctggtaaag 32477106
acagcctgac tgacacagaa ccatgattct atgtttcata aaatattggt 32477056
tttatttttt taattagtaa ataaggctcat gacagatttt actcagagtg 32477006
aaggcctact atgatgacaa ttatccctaa ccatctttct ctgccaaatt 32476956
ctttactttc cttaacccaa aaacaagctc ctcccttttc caaccagctg 32476906
ctataagatt tggttgtgga aaggaggaaa cagaaagcaa aaaggggagt 32476856
ggggtaaagg atgctgggga aagggggagc agacagaacc ctttgtgcca 32476806
gctcagaact gggaaaggac attacattca ccaatggcag attctcagcc 32476756
tcaccccccc gttcatcctc ctgaactcta ggttttgagg agacacagaa 32476706
ttgggtcttc ttaacatca cctcttctct aatagGTCTT TTTCATCAGA 32476656
CATCAGAAGG AGACTTGGAC GATTTGGCTC AGGATTTAAA GGACTTGTAC 32476606 [E95*](#)
CATACCCCAT CTTTTCTGAA CTTTTATCCC CTTGGTGAAG ATATTGACAT 32476556 [I124T](#)
TATTTTTAAC TTGAAAAGCA CCTTCACAGA ACCTGTCCCTG TGGAGGAAGG 32476506 [S132Afs*21](#) [T133I](#)
ACCAACACCA TCACCGCGTG GAGCAGCTGA CCCTGAATGG CCTCCTGCAG 32476456 [A160T](#)
GCTCTTCAGA GCCCTGCAT CATTGAAGGG GAATCTGGCA AAGGCAAGTC 32476406 [C165R](#) [S171F](#) [G172S](#)
CACTCTGCTG CAGCGAATTG CCATGCTCTG GGGCTCCGGA AAGTGCAAGG 32476356 [T177A](#) [T177S](#) [R181X](#)
CTCTGACCAA GTTCAAATC GTCTTCTTCC TCCGTCTCAG CAGGGCCAG 32476306 [R204H](#) [R207K](#)
GGTGGACTTT TTGAAACCCCT CTGTGATCAA CTCCTGGATA TACCTGGCAC 32476256
AATCAGGAAG CAGACATTCA TGGCCATGCT GCTGAAGCTG CGGCAGAGGG 32476206
TTCTTTTCCCT TCTTGATGGC TACAATGAAT TCAAGCCCA GAACTGCCCA 32476156 [P255L](#)
GAAATCGAAG CCCTGATAAA GGAAAACCAC CGCTTCAAGA ACATGGTCAT 32476106
CGTCACCACT ACCACTGAGT GCCTGAGGCA CATACGGCAG TTTGTGCCCC 32476056 [C283G](#) [I287T](#) [G291S](#)
TGACTGCTGA GGTGGGGGAT ATGACAGAAG ACAGCGCCCA GGCTCTCATC 32476006 [R310*](#)
CGAGAAGTGC TGATCAAGGA GCTTGCTGAA GGCTTGTTC TCCAAATTCA 32475956
GAAATCCAGG TGCTTGAGGA ATCTCATGAA GACCCCTCTC TTTGTGGTCA 32475906 [T337S](#) [T337N](#) [L339P](#) [V341L](#) [V341A](#) [I343N](#)
TCACCTGTGC AATCCAGATG GGTGAAAGTG AGTTCACCTC TCACACACAA 32475856

ACAACGCTGT TCCATACCTT CTATGATCTG TTGATACAGA AAAACAAACA 32475806 [H376Y](#)
CAAACATAAA GGTGTGGCTG CAAGTGACTT CATTCGGAGC CTGGACCACT 32475756 [I387T](#) [H392del](#)
GTGGAGACCT AGCTCTGGAG GGTGIGTTCT CCCACAAGTT TGATTTTCGAA 32475706 [V401A](#)
CTGCAGGATG TGTCCAGCGT GAATGAGGAT GTCCTGCTGA CAACTGGGCT 32475656
CCTCTGTAAA TATACAGCTC AAAGGTTCAA GCCAAAGTAT AAATTCCTTC 32475606 [H443P](#)
ACAAGICATT CCAGGAGTAC ACAGCAGGAC GAAGACTCAG CAGTTTATTG 32475556 [H443Q](#) [S445P](#)
ACGTCTCATG AGCCAGAGGA GGTGACCAAG GGGAAATGGTT ACTTGCAGAA 32475506
AATGGTTTCC ATTTTCGGACA TTACATCCAC TTATAGCAGC CTGCTCCGGT 32475456
ACACCTGTGG GTCATCTGTG GAAGCCACCA GGGCTGTTAT GAAGCACCTC 32475406
GCAGCAGTGT ATCAACACGG CTGCCTTCTC GGACTTTCCA TCGCCAAGAG 32475356
GCCTCTCTGG AGACAGGAAT CTTTGCAAAG TGTGAAAAAC ACCACTGAGC 32475306
AAGAAATTCT GAAAGCCATA AACATCAATT CCTTTGTAGA GTGTGGCATC 32475256 [p.\(Asn550LysfsTer27\)](#)
CATTTATATC AAGAGAGTAC ATCCAAATCA GCCCTGAGCC AAGAATTTGA 32475206
AGCTTTCTTT CAAGTAAAA GCTTATATAT CAACTCAGGG AACATCCCCG 32475156
ATTACTTATT TGACTTCTTT GAACATTTGC CCAATTGTGC AAGTGCCCTG 32475106
GACTTCATTA AACTGGACTT TTATGGGGGA GCTATGGCTT CATGGGAAAA 32475056
GGCTGCAGAA GACACAGGTG GAATCCACAT GGAAGAGGCC CCAGAAACCT 32475006
ACATCCCAG CAGGGCTGTA TCTTTGTTCT TCAACTGGAA GCAGGAATTC 32474956 [W655S](#) [W655C](#) [Q657L](#)
AGGACTCTGG AGGTCACACT CCGGGATTC AGCAAGTTGA ATAAGCAAGA 32474906
TATCAGATAT CTGGGGAAAA TATTCAGCTC TGCCACAAGC CTCAGGCTGC 32474856 [L680M](#)
AAATAAAGAG ATGTGCTGGT GTGGCTGGAA GCCTCAGTTT GGTCCTCAGC 32474806
ACCTGTAAGA ACATTTATTC TCTCATGGTG GAAGCCAGTC CCCTCACCAT 32474756
AGAAGATGAG AGGCACATCA CATCTGTAAC AAACCTGAAA ACCTTGAGTA 32474706
TTCATGACCT ACAGAATCAA CGGCTGCCGG gtattgtaaa tatcagtggt 32474656 [P752L](#)
ttgtgctttg ttcacttaaa aaaaaataac agtgataaaa tttggaaaag 32474606
gagagaggag actttatttc ttctaaaggg ttacagcctg caagtggcc 32474556
atcccacagg ctgagaaaca tgcctccaac caagaccaga gacaggcacc 32474506
tcgaaggagg ggttgggta gacactttat gttgaatggg ttggctaaac 32474456

atacatattc aacagattac aggaggagct atgaatattc atgaaggtgg 32474406
tcttgataca tgcattattga ataaacatgc atgtaacata caacccatgt 32474356
tcactttggg gtggagattt agcattaaat caagcttatc caacctgcag 32474306
tccgtgggct gcacatagcc caagacggct ttgaatgtgg cccagcacia 32474256
attcattttt gtgtagccca agacaattct tccaatgtgg cccagggaaa 32474206
ccaaaagatt gtacaccctt ttaaattgatt taaatgtatt acaattaggc 32474156
ctatacttca gaagttcttt tcagagcaca aaggtaagca ggtacgcaat 32474106
ctctgtaaac cagccagaac cagtctgtgg ttggtggtcc tctgatcagg 32474056
agaaagttag tgaaatcact ctcttctcca atcaaagctg tagttatggc 32474006
agatggaaca gggattgtta gcatttgtga gctggatgag ttgcgaattg 32473956
tttaatatc acaactatca atattgctta tcttgagacc aatgcttgtt 32473906
tagctaccaa agaagaaaaa tctgtggcag ttacgacaga gtttattctt 32473856
tttaaatttt tttttttttt cgaggttggg tcttgctctg tcaccaggt 32473806
gggagtgcag tgggtgcatc acagctcatt gcagcctcaa cctcctgggc 32473756
tcagttgatc ctcatgtttt gatTTTTtTat ggggagatga ggtctcacta 32473706
tgtttccag gctggtcttg aactcctggg atcaagcagt tctactgcct 32473656
ccaccttcca aactgttggg attacaggcg tgagccacca cgcccagcct 32473606
aggacagttt attctttaag cgtagagctg aatgacttag cctttgcctg 32473556
gcatggtcct atgtcctcct tataacttgg taatttattg ccacaaaaag 32473506
tctgttctgt tagtcttatg atctctatgt caacagtaat gctgatgagt 32473456
tgtgttcaaa ccatacaaga gagggagat aatgatgtgt gtttgacctc 32473406
ccatcctgtc atggccagga actgagttta aggttttttt ctgggggtctc 32473356
cttagccag aggggatgca ttcagttggt ggggggctta ggatttttag 32473306
tttacagcta taatcaagac tggctggaaa tattagccag gaatactgtg 32473256
aaaatgtag atatatagtt ttgctttatt atttattatt tatttttata 32473206
gatatagggg gtacaagtgc agttttgtta tatcgatata tttcgtggtg 32473156
gtgaaatctg agcttttagt gtaaccacca ttatcagatt atttctcatc 32473106
cctgcctcc ctgtcacgct cccaccttc caagtctcca tgtctattct 32473056

gctttctatc tccatgtgta cacattatth agctcccact tgtaagtgag 32473006
tatatatggt atttgattht ctgtttctga gttatthcac ctaagataat 32472956
ggcctccggt tccatcaatg ttgctgcaaa agacatgatt tcattthttat 32472906
tagthtttggt ttaaattthc tagtagthtc taccaggtgt caggacttga 32472856
aaggaaggta gaagggctgt ggagagaggt ctatgthggg ggaaagctgt 32472806
tagattggga gccataggga agattcccag agctgtagtc tgattggaaa 32472756
gatataata cacatacata catagataca tatatgtatg thtttaata 32472706
tattaaaact atthttatta aaaatgtaaa tatactaaaa atatthttat 32472656
taaaaaatat attggaaggc tgaggcaggt gggcacctg aggthgggag 32472606
ttcaagacca gcctgaccaa catggagaaa ccccatctct actaaaaata 32472556
caaaattagc cgggcgtggt ggcacatgcc thtagtccca gctactcggg 32472506
aggctgaggc aggagaatca cttgaacctg ggaggtggag gthgcggtgg 32472456
gccgagatca cgccattgca ctccagcctg ggcaacaaga thgaaactct 32472406
gtctaaaaaa aaaaaaaaaa attaaaaaaa ataaatata acgcaggtta 32472356
agctthtctt cagcaaatcc thctcctgcg agcaccccca thcttaccga 32472306
atacccagtc thtccctgcc aagtggcacc ctgccctact tcaagtcttg 32472256
gaggaaatcc aacctgtaaa ttaatcacct gcaggagcta ggagctaatt 32472206
gthttacaag atthctatct gggaaattgt agaagatact cagctccgtt 32472156
cccaccctaa ctgthgttha cthgthggg gccaggccag thgactcaca 32472106
cctgtaattc caacactthg ggaggccaag gcaggaggat tactthgagat 32472056
cagcctggac acaataggaa gaccctgtct ccaacaaaaa ttaatcatct 32472006
ggcctgatg thgcatgcct gtaatcccag atactccaga ggctgaggtg 32471956
ggaggatcac thgagcccag gaatthtcag gctgcagcaa gatatgatca 32471906
tatctgtgcc thggcaacac agcaagacc thctccaaa aagaaaagaa 32471856
aaagaagaat gaatgacaga agatthggg aatattgtct aacatgatga 32471806
aatthcagat thtagactth agacacagat atgaggggc aatctthctg 32471756
ggtaacgggg atactthccc aaatthcaaa taactactaaa ggagaatgth 32471706
thccctacct thgtagacca gcctgthtg cccgagcagg aactgctatg 32471656

tgggtggaag ccatgggaag caggaatctt gctgtactta actgtagcag 32471606
tctgggggta gttttcaaac gctagcaatt tcccaccag ctctgccttg 32471556
cttgtcacc tacagagaaa tttcctatca ttttaagatt ctagaatttt 32471506
ttgtacagat aatctttgaa acctcctccc taatgagggga atcccttctg 32471456
taagattctg ggtgtcacga agactgtatt agactacctt ctgtgtcagg 32471406
aagctcacca tctactcatg acaactattc ttttatactg atcctgtaaa 32471356
gtgatcacct atgtgctgaa tttggcctat atgggtgttta taattatfff 32471306
ttaatgtttg ccatttaaaa aaagtattta ctttatttaa ttattatfff 32471256
tttgagacag ggtctcactc tgtcaccag gctggagtgc agtggcacia 32471206
tcttggtca ctgcaacctc cacctcccgg attcaagcaa gtctccggcc 32471156
tcagaatccc aagtagctgg gattacaggc atgcaccacc acacctggct 32471106
aatttttgta tttttagtag agacgggggtt tcaccatggt ggccaggctg 32471056
gtttcaaact cccaacctca ggtgatccac ccgcctcggc ctcccaaagg 32471006
gctgggatta caggtgtgag ccaccacacc tggcccaaac ctggtgattt 32470956
tttaaaggta tacataacga tagccaacat tattgaacac atacaggtat 32470906
tattgaagca aatttcgtgt atcaactcat ttagatgtct taaccctata 32470856
aggtaaattt tttctatfff tcatttttgt ggatacatag taggtatata 32470806
tatttatggg gtacatgaga tgctttgatc caggcatgca atgtgtaata 32470756
atcacatcat ggaaaatgga gtatccatcc cttcaacctt ttatgttttg 32470706
tgtaagaac aatccagttg tactgttagt tattttaaat atacagttaa 32470656
cttatfffga cttagatact atgttgtgct atcaaatact agatcttatt 32470606
tatcccttct aagtatfff ttgtatccat taaccatttc cacctcctcc 32470556
ctactaccct tcccagcctc tggtaacct ccttctactc tccgtgagtt 32470506
caattgfff gattfffaga tcctacaaat aagtaagaac acgtgatgtc 32470456
tgtctttctg tgcctggctt atttcactta ccataatgac ctctattcat 32470406
ctgtffffff tttttttttt ttttttgaga aggagtctca ctctgtcgcc 32470356
caggctgggg tgcatgggtg tgatctcggc ttactgcaac ctctgcctcc 32470306
caggttcaag tgattctctt acctcagcct cctgagtagc tgggattaca 32470256

ggcgcccaat aacacgcctg gctaattttt gtatttttta atagagacag 32470206
ggtttcacca tgttgaccag gctggccttg aactccagac ctcaagtgat 32470156
ccaccacact cggctaccca aattgctggg attacaggca tgagccaccg 32470106
tgccccgtct ataatcccat tttctacata atgctcagcc tcctaagtgc 32470056
ctgggaccac tgacatgtgc caccacacct cgctacctca ctaatttttt 32470006
ctcttctcat tctcctcctc ttcctcctcc ttctcctcct cctcctcctt 32469956
cttcctctcc cttcccctct ccttccccct ccccctctct ccctctcctc 32469906
ctcctcctcc tccttctttt ttgtagagag gaggtctctc tatgttgcca 32469856
aggccagtct tgaactcctg ggctcaagtg atcctcccca tcagtctcgc 32469806
aaactgctag gattatatgt atgagccact gcaccagcc agttttagaa 32469756
gggttttttt tgtgggggtt gcagaagggg gtgttgtaga ttccttgaca 32469706
tttttatcat agacaatcat gttatcttcg aaaagaatga ttttaaattc 32469656
ttcccttcca atctgtattc cttttattta tttttttttt ttgccttatt 32469606
tcactaacta ggactttag tagaatgttg aatagtgaca tgaattaaca 32469556
tcttgccctg ttcctgacct tagggagaaa gcattcagac tttcaccttt 32469506
aagtataatg ttaaagttag ttttcttgta ggtgtctttt atcaagttgc 32469456
tgagaatttt ttttttttgg tcatgaatag gtgttggatt gtgctaaaga 32469406
tgttttctgt atccatttat atgatcatgt cattttacat ggatggatgt 32469356
tggattgttt ttattaaatt attttttagat tatttttgag gcagggctct 32469306
gttctgtcac ccaggctgga gtgcagtggc gtgatcatag ctactgtag 32469256
ccttgacttc ctgggctcaa cagatccacc cacctcagcc tcctgactag 32469206
ctgggaccat aagtgtgaac tatcacatct ggtaattttt taaatttttt 32469156
gtagagacga gttctcgcta tgttgcccag gctggctctg gactcctgtg 32469106
ctcaagagat tttcccgcct gggcctcccg aagtgctggg attacaggcg 32469056
tgagccacct agcctggatg ttggattatg tcacatgtgt tttctgcatc 32469006
aatttatggg atcacgtagt tttactttta gactgccaat ataatgaatt 32468956
atatggattg atttccacat attgagcatc ctgcattccc tatatgaagc 32468906
ccatttgag gtggtgtaat attctttttt tttttttttt tgagatggaa 32468856

tcttgctgtg tcaccaggct gagtgcaatg atgcgatctc ggctcactgc 32468806
aaccgccgcc tcctggggtc aagcaattct cctgcctcag cctcccaagt 32468756
agctgggact acaggcgcgc caccacgccc agctaatttt tgtattttta 32468706
gtagagacag ggtttcacca tgttgccag gctggctca aactcctgac 32468656
cttgtgatcc acctgcctcg gcctccaaa gtgctgggat tacaagtgtg 32468606
agccaccacg cctgccgtaa tattctttta tgcattgactg aattccattt 32468556
tctattttgt tgaagatttt tgattctgta ttcattgaatg atattggtct 32468506
aaagttaaat tttctttctt tcttttcgag atgggggtctc actctgtcac 32468456
cagggctgga gtgcagtggg gcgatctcag ctactgcaa cctctgcctc 32468406
ctgggttcaa gcgattctcc tgcctcagcc tctggactag ctgggattac 32468356
aggcgcctgc cactacacc agctgatttt ttgtattttt agtagagacg 32468306
gagtttcacc atgttgcca ggctggtgct aaactcctga cctcgtgatt 32468256
tgcctgcctc gccctccaa atgctggga ttacaggtgt gagccacctc 32468206
gccagcctc aattttcttt cttttctttt ccgtccttcc ctccctcctt 32468156
tctttcteta ttctctctct ctctctcttt ctttcattaa agacattgtc 32468106
tcattctgtc accaaggctg gagtgcatg gtgtcatcac acttcattgc 32468056
aatcttgaac tcctgggctc aagcgattct cttgcctcag cctcctgagt 32468006
agccaggact actcacacct gccaccacac ctgggtaatt taaaaaatat 32467956
tttgtagga tagggctctg atatattgcc caggctggtc tcaaactcct 32467906
ggcctcaagt gatcctccta cctctgcccc ccaaagcacg gggattatag 32467856
gagtgagcca ctgtgcctgg cctaaaagt tttcttctac gtctttttct 32467806
ggttttcata tcaagttaat gatggcttca taaaatgagt tgggaattat 32467756
tctttgtact tctattttct ggaagtgact gtgtagaatt ggtgttattt 32467706
cttctttaa tgtgtggtag atatgaagac agttgataga aggaaaaaaa 32467656
tgaaaatgtg tggcagaatt tgcaagtga catatctgtg cctacagatg 32467606
tcttttccgg gaaattttag ataacaaatt caatttcttt aatagctata 32467556
aggttattcc ggttacctac tccgtatcac atgagtgttg gtagtttgtg 32467506
gttttcaaaa aattggtcaa tttcatatat gttgtcaaat ttatgtgcat 32467456

agatttgttt atattattct ctaattgtcc ttttaatatc tgcagtgtgt 32467406
gtagtgatat cccctttttt gtttctgata ttggtaattt ttgtcttctt 32467356
tttctttgtc agtcttggtg gaaattttta aattttattg atcttttcaa 32467306
agatccaact ttttagcttca ttgatttttt tctattgttt acctgtttat 32467256
aattttgatt tctgggctgg gcatggggc tcacgcctgt aatcctagca 32467206
ctttgggagg ctgaggccaa aggatcactt gtgctcagga gtccgagacc 32467156
agcctgggca acatagtgag accttgcctc tgtttttaat ttgtataata 32467106
aaggcataat aactttgatt tgcaccctta tctttattat tttctttctt 32467056
ctttcattta ttttgctctc ttttctgtaa tttcttaagt agtatgccta 32467006
ggttgttgat ttgaggcctt tcctcatttc taatataagt atgcaatact 32466956
gtaaagtcc ctgtaagcac tgtgttagct gcagattttt ttttcttttc 32466906
accctttgt gaggagagag ctgcagattt tgaagttttg tttttatttt 32466856
tatatttttc aaaatattat caaagtttcc atgagacttc ttctttaatg 32466806
catgattatt taaaaatgtg ttgtttaatt tccaagtgtt tagaaatttc 32466756
cctgttatcg gccaggcgca gtggctcacg cctgtaatcc cagcacttcg 32466706
ggaggccgag gcaggcggat cacgaggtca ggagattgag accatcctgg 32466656
ctaactggg gaaaccccg tctactaaa aatacaaaaa aaattagccg 32466606
ggcgtgggg cagggtgcctg tagtcccagc tacttggggag gctgaggcag 32466556
gagaatggg tgaacccggg aggtggagct ggcatgagc tgagattgag 32466506
ccactgcact ctagcctggg cgacagagca agactctgtc tcaaaaaaaaa 32466456
aaaaaaaaaa aaaaaaagga aatttttttc cctgttatct gggaaattgg 32466406
tatctagtct attatttgca gaacatgctt acagtgaagt ataatgcca 32466356
tctcttataa aaagtatatt tttatgtcta tttcatgagc atttttggct 32466306
catgatgatc attaaaatct tttgattggg aacaaaaatg acagtaatag 32466256
taaagtacat agtaaataagc aaatatctgc tgaaagagtc caatcttttt 32466206
tcttttgaca **gGTGGTCTGA CTGACAGCTT GGGTAACTTG AAGAACCTTA** 32466156 [delexon5](#)
CAAAGCTCAT AATGGATAAC ATAAAGATGA ATGAAGAAGA TGCTATAAAA 32466106 [M775I](#)
CTAGgtcaga tttctgttct catatttgta tcaatgtaag tttgataata 32466056

agaggagtta acttcaggct ctgacattgg ctgtgtctgc acaaggcaag 32466006
gatgttttta tgtacttgtg gctacattgg tttccccaga cattttccct 32465956
actgccatta aaatccttca gcatcatttt attcaaattg tacaacacca 32465906
gatggtaacc cttttgggaa gagagcccct gacgtgtttt taacttccgt 32465856
ctccctggct cattggctat gtttttattt aatgcataga aacaatattt 32465806
taaagtttat agtatagttt catagttagca tagaaacaat attttaaagt 32465756
ttatactatg gtttcatagt taaaaaatt cataaatgaa ataggacaca 32465706
gaaaacaatg tgaatcaaga aaactttggg ggaagcatgc tttcattcta 32465656
cactgcagggt tgtgtttccc caatcaaaaa aatgaaaagg aaaaggaaac 32465606
ttcaggaaca caagcagaac acatggctta ccacagggaa ccaggccctg 32465556
caggccaggg aggattcctg ttaaagctgc tttccttgaa tgtccctggt 32465506
ttctcgtgtg ttggattttt tttttttttt tttttggctc ttttttccc 32465456
tacttgagtc ctactaaaa tactcctctc ttcccttcat cttgttcttt 32465406
cttattctgc ttctgcccga aagacaactc tagcctataa gccaaacatg 32465356
gctgaagcct gggcatggtg gatcacacct gtaattccag cactctggga 32465306
ggccgaggca gatggatcac ctgagttcag gagttcgaga ccagcctggc 32465256
caacatggtg aaaccctgtc tctactaaaa atacaaaaat tagctgggca 32465206
tggtggtatg cacctgtaat gccagctact tgggaggctg aggaaggata 32465156
atcacttgaa ctcaggagga ggaggttgta gtgagccgag attgctccac 32465106
tgcactccag cctcggtgac agagatagac tccatcttga aacaaaaaca 32465056
aaaacaaaag caaaacatgg ctgacttctt ttccttatat gtccctacgtg 32465006
agaataatca aattaattca gtgttcaata aacatttatt gcatgtgtat 32464956
aaattacaca gaaaatcaga gctggaaggg gattgagagc atctaattca 32464906
actcattcat ttcacagaaa actccactag aacctaaaat agcttattga 32464856
cttgctcaag atcttaccaa ctggtagaaa gaggtcaaaa agtacctctc 32464806
taggatagcc tgcttctgct attaaggaat caaaatgtga acttgactaa 32464756
accagtctaa ttatatcagt aataatttac tctttattaa agagttactc 32464706
tgctatagat tagacactag cctcggcagt tttatatacc tcattccatt 32464656

gaatccccac aacagtccta gtacatagat ataatgatcc ctaacgcttc 32464606
agctaaaaga ttgaataact tgcccaagtt tataattatt aagtagggga 32464556
tccaggaact gactgcaaag ctcatgctca caacctttaa ccggtatata 32464506
ctcccatgac aacaatgaac atttatggag cacttactat gtgccaggca 32464456
ccacattaaa tatgttaacg tacattatct gcaaccttcc cgaaagctct 32464406
gcaagactga tattattaga atcatatatt ttatttcttt tcttttcttt 32464356
tctttgagat gggagtctcg ctctgtcgcc caggctggag tgcagtggg 32464306
agatgttggc tcaactgcaac ctctgcctcc tgggttcaag cgattctaata 32464256
gcctcaacct ccgaagtagc tgagattaca ggtgtgcacc atcacgcccc 32464206
gctaattttt gtatttttag tagagatggg gttccgccat gttggacagg 32464156
ctggctctga actcctgacc tcaggtgatt cgcctatcac tgcctcccat 32464106
agtgcctggga ttacaggtgt gagccacat gcctggtcat taaaatcata 32464056
tatttctttc ccgtaggcta cagtaccatc aagataagac agtattttaa 32464006
tgacacaaaag tgaggcctaa ccaatcctaa actgcacatt agcttttagac 32463956
ttaagaacgg gggatatttt agaatgtttc caattatact gttgatataa 32463906
ggtaaactct tcttctgggt aaacatgctg cagtggatgt ggtcttcatt 32463856
ctaaagcttc aggcaggccc catatcatga gtccaggcaa ggcttttgag 32463806
gctgtagaca gttgcactag aagcactcca aggagccaag tcctcatcta 32463756
cctccctgaa ctcagcccc ccgctgttta agatttttga gaagattgaa 32463706
aggagagtgc tctagaagac ttcattcatg taaagaatta cggtaaagat 32463656
atacattgat gccattaaa aagactacaa atttactaca gtgtttctca 32463606
tgctactaag agaataacct ccatataagt gattttttgt gtggccaag 32463556
agactggaaa gtgagaattg aaagaaaaaa agctctcgtt gattctttgt 32463506
aacttaaagt cgctgcagga agaacatggc aaggctctctg cacaattatt 32463456
ctttgctttc ttttcagttc attaatctat gcttaaactg aattaacttg 32463406
gtatcctaata gcattccttt ctatcatttt tcagCTGAAG GCCTGAAAAA 32463356 [G786V](#)
CCTGAAGAAG ATGTGTTTAT TTCATTTGAC CCACITGTCT GACATTGGAG 32463306 [L801V](#)
AGGGAATGGA TTACATAGTC AAGTCTCTGT CAAGTGAA^CC CTGTGACCTT 32463256 [P819S](#)

GAAGAAATTC AATTAGTCTC CTGCTGCTTG TCTGCAAATG CAGTGAAAAT 32463206
CCTAGgtaac tgttgcttcc attaactgaa tgaggacagt ataacagaac 32463156
atgtgatact attatactaa ttcacactaa atgtctcaaa tggaaattta 32463106
atTTtaagga aaactggaaa ataaaaactt ctcgataata agcagattgt 32463056
TTTTaatgat ttttctccat attagaatta aatcaactat tgatggataa 32463006
taggggagaa tttcagaata attgaagatg taatttttag agaaagttaa 32462956
aaggaagaaa ataagaaata ggtgcttgaa acttgccaca caaccggtca 32462906
tataatttac tgcctaataa acattttaat gaatggataa atgattgaga 32462856
agtgagagat aaagattttc ttaaattgatc tcaggcttct aattcctacc 32462806
cattgccctg ttaagatgaa gttaatgtgc atgatatgat aattgagcct 32462756
tctgagttcc caaagggatg catatcaact acggggaaac taactgcata 32462706
tttctggata aactatacat gtgtaattca gacatatttt aaaatttaga 32462656
TTTTtgaaaa cagtggata atctttttaa agttaaacta tataactgct 32462606
gggagtctct aaagataact aaggaagcca tttgtatact aatataaagt 32462556
tacagctaga gaaaccaca gttgaaaaag gctggataag tactgggaat 32462506
atgagaacaa tgagcacatg cttttatttc tctacttact gatggggaga 32462456
gacaggctta gaactgcaaa tagcaaacgt actcttttaa agagaagttc 32462406
agcaggTTTT ttattgtaga gcacaaaacc cagaagatac tTTaagaaaa 32462356
gggctcatat gattgattaa aaataataat agccaatatt ataacaagag 32462306
tacatattca tgaaaaactt gtctgatttt tttaaaaagg agatttttct 32462256
agccctgaca gaaaaaactt cagctagatt aagcaagagt gataatatgt 32462206
gaagaaaagc actaagcaat tcttagctag actggtacta ttatataatt 32462156
aatgTTTTgca tgcaaaatag ttttccatta cctcaacata tttgtgtctt 32462106
tgtcattcaa acacgtcttt tgtacacagc ataaaactgg gtcttgcttt 32462056
aaaaaaagtt ctgaatatct gattatctct gccttttaat tggagtgttt 32462006
agtccattaa gatttaagt aattgttgat atggataaat ttgaatctgc 32461956
cattttgcta tttgtttttt ttctcatcca ttttttacta tgtttttatt 32461906
attaatatct caactattat gtcaataaaa tcatctaagt tgaggtacac 32461856

aaaaccagct catttcattt ttgttgttgt tgttgttcct gtttctcctg 32461806
catgattaac ggcattttat aattgaagca actttacatt ttatctggtc 32461756
caactacctc attctataga ggaagacatt gaggcttaga gagaccaagt 32461706
gatttttcca tgatgacata acaactacat cccatgctgc tttaggttct 32461656
acgtgacctg gaattcatta atcagaacct aggaccaatg actatttgcc 32461606
catttgggtca taacatggg atttgggggt tacacctaca ccagagcctt 32461556
tggaaataat taaaataacc aaggcaagtt atggtttgca ctaccattag 32461506
cagagaagat aaaactcaga attattctaa ggatacttca aaatacattt 32461456
atatttacct gaaaatcttt ttattttgga ttactttttt tccccagCTC 32461406
AGAATCTTCA CAATTTGGTC AACTGAGCA TTCTTGATTT ATCAGAAAAT 32461356
TACCTGGAAA AAGATGGAAA TGAAGCTCTT CATGAACTGA gtaagaatga 32461306
caattcagcc aaaattagat acttgaatat gtatactggg tagtcgaaat 32461256
acatagcctg ggtcctgagg tcttttatac ccatgtgtgc cttactagat 32461206
gcaccctcct taggaaaatc attaggcct ttcttaaact gcccttaagg 32461156
aacacaggcc catgtctttt aagtcaccag tttacatatg ctcactgcac 32461106
tttgaggcgg tatcccacct gctttcctcc tttgaagagg caactgtcaa 32461056
gagtagccga tgtgcaagac aaatttgctt aaggaattgg tgatatgatt 32461006
ttttagggtg gatagtgata tgtgattatg gttaaaagaa aaaaaaggaa 32460956
agaactgatt catattgtcc atgatttgct ttagaataat acaggaggaa 32460906
ttaggtcagg attaagcaag attgcccag atttaatggt tttgaagggtg 32460856
tcttattagt atatatagtt tcattatatt cttctgcata atgtttgat 32460806
atgcttgaat actttccaaa aaaaaaccaa aaattaagta gattctcatt 32460756
acagattgag taggctgcag agccaccaa cataaagatc attcctcccc 32460706
taacaccctt ttgttcttcc tcagttttga gaccatccag tccctgaact 32460656
gctctttgtt tcttccagTC GACAGGATGA ACGTGCTAGA ACAGCTCACC 32460606 Q880E
GCACTGATGC TGCCCTGGGG CTTGTGACGTG CAAGGCAGCC TGAGCAGCCT 32460556 C890R
GTTGAAACAT TTGGAGGAGG TCCACAACCT CGTCAAGCTT GGGTTGAAAA 32460506
ACTGGAGACT CACAGATACA GAGATTAGAA TTTTAGgtag gtacacacat 32460456

acagagccaa gataactgga tttggccctt aaaaaattct taagttggct 32460406
ttgcttattt tgccccctta ttttattttg cttcctcttt tttttaaaaat 32460356
ataaatatgt ctaatgaatt cattcacggt agagtaagaa gacttaaaac 32460306
actggccttc cttcagattc tatttccttt acctacagaa ttaaataaaa 32460256
agcattcaca gtatccaaca agatgtatta tattagtcat agctcttact 32460206
agccttaact ttctgaaatt cagcaatgcc cctccctcca atatcaggaa 32460156
atattttcaa gttacttact gggatttcaa aacatataaa ggcgaaatgta 32460106
gctgtatcta aatagagcca caaaatatct ttaaataagct gtaatattat 32460056
ccagaaacaa atagatctat ataaatgact gaagacacca ccaacctcag 32460006
gcagttgatg aaagaagcct tcatactatc tgtattagtt ttcaattcct 32459956
gtataacata tggcctcaaa acataatggc ttaaaacaat aaccattatc 32459906
tcacagtttc tgtggttcag gaatttagga gtttagcagg ttagctctgg 32459856
cttgacctct ctcatgagag gggctgctgg aggatctcct tccaaggtag 32459806
cttctcacat ggttggcaag ttaacactgg ctggtggctg gaggcctcac 32459756
ttcctcatca ttagacctct tcacaggctg tgagtgtcct cacaacatgg 32459706
cagcccactc atttctggtc acttctgaca tatcccactg gttgcacaag 32459656
ttattccaat ccagcgtatg gaaacattaa tacaaggagg tcaggctcat 32459606
caggttcaac ttggaagcta tcatactaaa gccaaggact tgtgaaaaca 32459556
gcctcgattg ccttcatttc tcttacagat tgtctaaaat gtgtttagtt 32459506
tacgtaacgt acaatttatt aaactgtttt tgttctttgt tttttgtttt 32459456
tttttttagac agagtcttgc tctgtcgcgg aggctggagt gcagttgcgc 32459406
aatcttagct cactgcacac tccacctccc tagttcatgc cattctcctg 32459356
cctcagcctc ccgaggagct gggaccacag gcgccagcca ccacgcctaa 32459306
tttttttttt tgtattttta gtagagatgg agtttcaccg tgtagccag 32459256
aatggtcttg aactcttgac ctctgtatcc gcctgccctg gcctcccaaa 32459206
gtgctgggat taaaggcttg agccaccgca cccggccta ttaaactgt 32459156
ttttaagtgt aaaagctttg tggcattaag tacattcata ttattgtgcc 32459106
actatcacia catccatctc cagagcttct tcacttccc atatatacac 32459056

acacatatat atgtccccaa cactggagaa cctagatata taaagcaaat 32459006
attgttagag ctaaagagag agatagaacc caatacaaca atagctggag 32458956
actcgacacc ccatttacag cattggacag atctcccaga cagagaaatca 32458906
acaaagaaac atcagactta atctgcacta tacaccaa at ggacctatat 32458856
ttatagagca tttcatccaa cagctgcaga atacacattc ttctcctcag 32458806
cacatggatt attctcaagg atagaccaca tgttaggcca caaaataagt 32458756
cttaaaaaat cccccaaaat tgaaatctga ttcaagtatc ttctctgacc 32458706
ataatagaat agaataaaac tagaaaccaa taaccagagg aactttggaa 32458656
actatacaaa catatggaaa ttaaacaaca tgctctggaa tgacaagtgt 32458606
gccaatgaag aaattcagaa ggaaactgaa aaatttcttg aaataggctg 32458556
ggtgtggtag ctgatgacta taatcccagc actttgagag gccaaagggtg 32458506
gaggactgct tgagcccaga agtttgaaac cagcctgggc aatatggtaa 32458456
catgtcgtct ctacaattaa aaaaaaaaaa aaaaaaatat atatatatat 32458406
atatatatat atatatttaa aatttcttaa gacaaatgaa aatggaaaca 32458356
caacatactg aaacctatgg gatacagtga aagcagtatg tcccctcccc 32458306
tccttccttc cctcccttcc ttcttccttt cctccctcc cttccttcct 32458256
tccttccttc cttccttcct tccttccttc cttccttcct tccttccttc 32458206
ctccctcccc caccctctc tttctctttg agacagggtc tcctgttgc 32458156
ccaggctgga gtgcagggat gtgatcacag ctactaacc tgaaacttct 32458106
gggctcaagg gatcctcctt cctcaactac ccaagtagct gggactagag 32458056
gccactatgc tccgcta atg gaccttcctc ttcaacgacc ttcccttcca 32458006
ctctccttca tccattcatt ctatgagcat gcaatgacta gattatgaca 32457956
agccacttaa aattgttcta cctgcaaaat aataaatgca gatatcccat 32457906
tctcaaacca caacctcctg tatttctatc tactccta at caccagttct 32457856
tttacttcac tgggacttcc agtccgtcga tcccgtacc ttctacctat 32457806
ttttcaggcc ctttctattt tgacttgctt tcctacctag tttcaactcc 32457756
atcttccatc cctgcaaaca ttcttgtctt taatagctga aattctcatg 32457706
gccacagta gcatgagtca attcaggcaa tgactttgag tgatggatgt 32457656

gtgtgataga tgcaatggtg aaatgaagag tgtaatgaga gatggagtct 32457606
ctaattaaag aaagactacc taatgagatg caggcagaac atgagatgtg 32457556
gaatgagagg tatgaaatga aatatagtag atggggtgta ctttcctgac 32457506
aaaaccccg gcctggattg tccttaaatt tcccttttta aaattttgta 32457456
actacactta ggatactggg gaaaaactgc aaaatttggg agataaatac 32457406
aagttcatac tgacaaaatt caacgaaaat atttagaagt gaatggtaag 32457356
aaaacgctgt atatcaaac ttgtagcatg cagcaaaagg cagcaaaaaa 32457306
gagtaacttt acagtggaga aagctgttga cactaccttg gtcaggtgaa 32457256
caaggtcaac attaacagtg gtgattcatg ttgatagtat gtacctagat 32457206
atgacatgac gaaaatagta ctttacctct atgatattcc tccccaaaga 32457156
tccatatccc ccatctaatt atgagaaaaa catcaaacia tcctaactga 32457106
gggacttcta cacaaaactg accagtattc cttgaaactg tcaaggaaat 32457056
aaaaaacaag gtgattgtga gaaatcgtca taagcatgag gaacctaaag 32457006
agacatgaca atgaaatgta atgtcctatc ctggatgagt tcctgcaaca 32456956
gaaaaaaaga catttggcga aaactaaggc tgggtgtggt ggctcacgcc 32456906
tgtaatccca gcactctggg aggccgaagt gggcagattg cttgagccca 32456856
ggagtccgag cccagtctga gcaacatggc aaaactcaat ctccaaaaaa 32456806
ttagctgggt gtggcagcgt acgcctgtag tcccagctac ctgggaggct 32456756
gaggtgggag gatggcttga gctcaggaag ttgaggctgc agtgagctgt 32456706
gatcatgcca ctgcattgca gcttgggtga cagagtgaca cccagtcccc 32456656
cacccccccc ccacaaaaaa aatagaaaa agaaagaaag tgaaaataca 32456606
acctacagaa tgtgaaaaaa aaattgcaga tcacattatc taataaagga 32456556
cttccatctt gaatatataa aaaaactctt atggccgggc gtggtggctg 32456506
acacctgtaa tcccagcact ttgggagggt gaggcagggt gatcacaagg 32456456
tcaggagtcc gagaccagcc tggccaatat ggtgaaatcc catctctact 32456406
aaaaatacaa aaaaattagc cgggcgtggt ggcacatacc tgtaatccca 32456356
gctactctgg aggctgaggc agaagaattg cttgaatcct ggaggcagag 32456306
gttgacagta gccgagattg cgccactgca ctccagcctg ggtgacagag 32456256

tgagactcca tgtcaaaaaa caaaacaaaa aaactcttac aactcactga 32456206
taaaaaatgc aaataaccca atttgtaaaa tgggcaagaa tctgaacaga 32456156
catttcacca aggaagatat gtaaactcga aaataaatag cagaaaaacat 32456106
aatcaatatc attagccatc agggtaataa tgtaaaccba aactacaatg 32456056
agataccacc tgagaccac tagggatggt tattatTTTT tattaaaaga 32456006
catacaataa caagtgttgt tggcaaggat acggagaaat tcatatgctg 32455956
gtagttagaa tgtaaaatga tgcagctgct gaggaaaaca ttctggcaag 32455906
ttgttcaaaa tgttaaacad agagtgtca tatgaccag caactctctt 32455856
cctaggtact caagataaat gaaaaccaat atccacataa aaacttgtat 32455806
attaatgttt ataatagcat gtttagtagc tcaaaagtgg aaacaactca 32455756
aatgtccatc aaataatgaa tggattaaaa aatgtagtat gaaaaaaatt 32455706
agctgtgtgt ggtggcacat gcctgtaatc ccagctactt gggaggctga 32455656
ggcaggagac tctcttgaac cgagaagggt gaggctgcag tgagccaaga 32455606
tcgcgccact gaactccagc ctgggtggga gagtgagact ctacctcaa 32455556
aaaaaaaaaa aaaaatagcg ggggctgggc ccagtggctc acgtttgtaa 32455506
tcccagcagt ttgagaggcc aaggcgggtg ggtcacctga ggtcaggatg 32455456
gcaccactgc actccggcct gggagacaaa acaaacaaac aaacaaaaaa 32455406
cagtgaataa acacaatctc tcttaatat tcttggcaat cttactgtgt 32455356
ttctgtattc aacctgtat gtaaactatt tcacactttt ttcttctcaa 32455306
tcagtactca gcgtctccta tttcacagag gatgtgactg ttatTTTTTT 32455256
ctctccttct ccttagagct tataggtttc tcttctccta cctaagggca 32455206
gtctcttttag cagtgttga gatgccagcc tcaccctcac tccagttcag 32455156
ggacatcatt ttattgactg tgctcttgt tactgactcc ctctgtcag 32455106
tttttaaagt tgctcaaatc tcttccattt taaataaaac tctccctgag 32455056
tcctatcttc ctcttttgt tatcattcta tctctcctct ccttcaagg 32455006
aaaagctcta aaacaaattt tatgtaccct tatgacatct ccatttctctg 32454956
accatctgct actttctact cattgcatct gactctccac acccctccat 32454906
gtggctgaat ttcaatagac actttcagaa gtgtttaatt tatttgattc 32454856

ctccgcagga gttgacactg agcattccct tcttttcaaa acattctctt 32454806
gacctccatg ccaccttggc tactttctcag tcttcttttc aatgggtgatt 32454756
cctctacca gatattaaat gtttctagtt ttccttaaag cttgggtctag 32454706
actatctgct gttcttcctc agagattgca tttgatctcc aagctttgcc 32454656
atgttttgct tgactcccaa aattttgttt cttacccatc agcaatctga 32454606
gactacaaca taaaaatcat tgctagctca ggtatctatt tcacctgttt 32454556
ttttgtttgt tttgttccag gctgcagtgc agtggtgcca tcttggctca 32454506
ctgcaacctc cgcttcctgg gattctctgt tctctattcg cttctctgaa 32454456
tctcaagtga ttctcctgcc tcagcctccc cagtagctgg gattaccggt 32454406
ccatgccgcc actataagta tgtgccatta taagtgtgtg cactatgccc 32454356
agctaatttt tgtattttta gtagagacga ggtttcatca tgttggccag 32454306
gctggctctca aactcccagc ctcaagtgat ctgcctgctt cagcctccca 32454256
aagtgctggg cttacaggca tgagccacca tgcctgacca atttcacctg 32454206
ctctaacaaa accctttgtt aaatgggatc tttcaacttg gatgtttgaa 32454156
gctgaactct gctatccagc ctgttctcaa agagagctca tgcctgtaat 32454106
cccagcactt cgtgaggcca aggtgggtgt atcacttgag gtcaggagt 32454056
caaaaccagc ctggccaaca tggtgaaacc ctgtctctac taaaaataca 32454006
aaaattagct gggcgtagtg cacatactta taatcccagc tatacgggaa 32453956
gctgagttgg caggatcact tacttgagcc agtggggcag attgcagtga 32453906
gctgagattg caccactgca ctctctggga acagagccag aacctgtctc 32453856
aaaaaaaaga aaaaaaaaaaag ccatcgcaga ccctattcat gttctagaag 32453806
ctctgtgtta aatcctgggc ccaatcattc tgctgtatag atcccgtat 32453756
catattttat tttccaaaag ctctttctta gcatcttatt gttgctgagt 32453706
agatgcagtc tactgaaaaa cttaggatct ctgaaaaact taggtctttg 32453656
gagtttgatt tttcttgttt tctacagtgc ctgatttctt tgggagttgt 32453606
tttggctttt agtctcagtc ttccttgagg gaggctgttg tcaaagtctc 32453556
gataatcctg cactgtcctc ttcacatttt agaggagac acaagttgat 32453506
agggagttct gtgtgtctaa gggaggcggg gaatttttga caggctaact 32453456

ccactagggg gtgattgggc aagcaaaatg gcccttctt thtagggcct 32453406
tttcccgggg ggcagttcca tttctcctaa gaatcctcca gtcttcctcc 32453356
tggagcatat aagcccaatt gcaagtgttc tgggaacaaa gtggagtggg 32453306
aaagcctatt gcttttgtgt gctcccaggg taccctgacc taccatagca 32453256
cccaccacc atctaattac tttataatgc atgtcttcac actattttgt 32453206
aagcccattt agacaggac catgtctgtc gtttacacat atccccagca 32453156
cccagcataa tccgcagcac atagtagcac taaagatgtt gctgaatgaa 32453106
taaacagtga gaactctggg actcgttcag gtgaactaca ggacaacaca 32453056
aatgaagagt tgtgtttggg atacaggaac cccaagaat cagaaccctt 32453006
ctaccaggg catctgagat ttttctgga attccaatca agccatttgc 32452956
actctccaca gccacatac agcctatggc tctaaatgtc atggattctg 32452906
tttctcttgg atctagtctg ctctcataa cataagcact gcagattaaa 32452856
tgaacaaaag gcatgccctt ggcttatgac aaatgttggt tgttcttggg 32452806
tcctgcacta gcacacattc caataattat ctaagaaact ctcttaaatt 32452756
gatgataaga tccttatacc ttagtagata accactataa attgctcacc 32452706
ctgtgagggg ggaatgggct ttaaattctt cttaaattcc ttttaggtgg 32452656
tgaaaatatg ttctgctagc tgagaaggag aaaaaaagt gatccttggg 32452606
gaaagagcct taaatagaca cacaactggc aaccagcatt tggactgagt 32452556
gcatgccatg ctgggaagca tatggagaag gggcaaaggc agaaaggaca 32452506
tgaacatgag atggaagaga gagcaggag aaagccatcc tccaaggaac 32452456
agaggaggtg gaaggcaggg gaaagtaagg acctaggtac tatttgggct 32452406
gggcataggc tacgctgtga taacagagac ccaactatac catggcttac 32452356
agaaggcaga acttgattct ctatcatgta acagtccaga aatgagcagt 32452306
ccaggcaggt ggggtgggtt tcctctgtgc agtctttcag gccagaccc 32452256
ctactttttt tttttactcc tctattcctt aagagtgtta tttttgactt 32452206
tatggccata gctaggtcac tgccctgtga tcatttcaac ctagtagaag 32452156
aggggaaaag cggaaaagt acatggaagt tgcacacatc acttctgcct 32452106
atacttcctt ggcaaaaatt tagccacacc taatagcaag ggaggttggg 32452056

atatgagtgg ccatatgccg aaataaaaact ctattaacta tggaataaagg 32452006
agagacagtt ttgggaacaa ctagcagtct gtctcacttt tcttctcttt 32451956
ttttttttga aatggagttt cactcgttac ccaggctgga gtgcaatgg 32451906
gtgatctctg ctcaccgcaa cctctgcctc ctgggttcaa gtgatcctcc 32451856
tgcctcagcc tcccgaatag ctgggattac aggcatgcac caccacgcct 32451806
ggctaattct gtatttttac tagagacggg gtttctccat gttggtcagg 32451756
ctgggtctcaa actcctgacc tcaggtgatc tgcccgcctt ggctcccaa 32451706
agtgctggga ttataggcat gagccaccgc acccggcctc tgtctcactt 32451656
ttcaaattaa taaaagtggc aaagaaggcc caaagatgg 32451606
ctgaccatgg gtaagagaca tgaaggcaga accctgtgaa tcatctcctt 32451556
acctggcttt gccacttta gccgctagca tcttgaccac ggtcaggcag 32451506
ggccaatcac tttaggtgtc tgtaaagaag aacctgaaga ctttcgaaa 32451456
ctcaagacct tatgatggtg ataaaagcat tggctgacat tgactaagga 32451406
cacactctag aatgtactta gttgactga acaaactaca caaggccatg 32451356
cagtgacatc agacaccaa ttcacagatc tcctctcact acggagctgg 32451306
taaacacctt tactgaaagt gggtaaggt atagtttcag tgcataacta 32451256
ggttgacctc acccacgtaa gctggtcgga caagactgtc catttctgtc 32451206
attaagccct cttactgggt agcagatacc ttttagtctt tgcttgctaa 32451156
ccttaagggt gtacagcacc gaatctttcc ttctttaact tgaactcttt 32451106
agtgtcttc tctctgagac aatggaaagg aacttttaaa acctcttttc 32451056
ctacttgaa tccaaactga atcatggacc ttcatctcca taagggtcag 32451006
tttctggaac attatctaatt attacacatc tccaagaaa cacaagtta 32450956
atatacaaca aattaaccct ccaaagttgg gtgaggtaca ctaagactaa 32450906
gatgagctcg gatgagccga gtaatgtgga ttgataaacc aggcatacat 32450856
cttctgcatt ttgtgtgtga tactctggag tataaacatg taagtaagag 32450806
ttcccatgtc cagtctgcct gtctgtccac tctgtacttc aagggtgaact 32450756
tagtcatcca gaaaggcca ggtaggtggg tagggctaac gctttgcaca 32450706
atthaatatg tgtaattaac acagagctag tttgtgaaa tcctaattgt 32450656

gtatactggc caatctgtat gatggtaaag aacctgaaaag aaaggtat 32450606
tttcttattg caagactcac ttgggttcca gtaccaccta aactggtaac 32450556
atgggataaa gaatgaacac taaactat 32450506
acacacacac acacacacac acacacatcc tttgtatgta tgtgtgtgtg 32450456
tgtgcattct ttgtgtatca gaaagacagg atatccacct accctatgta 32450406
ggaaatactt taggtgccct attctgtaag gaatggagga acttcctgaa 32450356
gaggctcggg agggttatac ataaacaggt aaacaaaaac acccaaactct 32450306
ttagatactg aaggaggctc acttactcaa gtttacagtt aggaacatac 32450256
ccatagaaac aacagttagg tgggtgtttac tttttcagaa gaggaaacga 32450206
cttaatat 32450156
ttaattaaag caaccttcca tttcctagga gtaaggaaaa ggggaaaaaa 32450106
aagtaattca tttacatatt gttgctacct cactacgaat cactat 32450056
cagattccct tatactctag gaaaataaa tagaccatat tcacaatcac 32450006
tgccctagct atagagaatt atattaataa tttctttctg aggcaaagca 32449956
ctggttcaaa catggccatt tcagagtga aaaaaagtat gtaaaataaa 32449906
tgtagaacct atttctcttt ttttttaaaa aaaat 32449856
tatacttatt tctttacca gGTGCATTTT TTGGAAAGAA CCCTCTGAAA 32449806 A929S
AACTTCCAGC AGTTGAATTT GGCGGGAAAT CGTGTGAGCA GTGATGGATG 32449756
GCTTGCC TTC ATGGGTGTAT TTGAGAATCT TAAGCAATTA GTGTTTTTTG 32449706
ACTTTAGTAC TAAAGAATTT CTACCTGATC CAGCATTAGT CAGAAAAC TT 32449656
AGCCAAGTGT TATCCAAGTT AACTTTTCTG CAAGAAGCTA GGCTTGTG 32449606
GTGGCAATTT GATGATGATG ATCTCAGTGT TATTACAGGT GCTTTTAAAC 32449556
TAGTAAC TGC TAAATAAAG TGTACTCGAA GCCA gtaagt gctctggggac 32449506
ctcattat 32449456
aagaagataa ggacgtggaa agaagttaa tttgatgatt aaaaacatgc 32449406
aacagttttg tgtcttagct ctctactag gattatcggc gccttgaagg 32449356
aattctcatt catctttgtg ttacctttgg tctgggtcac accaactgg 32449306
atactgaatg catattaact tagtatagtg cctggcatgt aagagattct 32449256

caacaatatt ctcaataaat attcgctgaa tatgagataa attattaata 32449206
gctactgaat aaagaaagat tattttaaac cagagaggaa actccatata 32449156
tgttctttaa tccaaacagt ttaattcaag caatctggaa tataaaaagc 32449106
actttctgat attagaagga gatcagactc ccaaaaaaga tcagcattct 32449056
ttagtcaagc aaaacttggg agtttaciaa cagctaaatc agaagcttga 32449006
aattcaggtc ctctccagta cctgctacat tatatgtaat tccaaacatg 32448956
acttcagaga ttaaagaaga aagggaagat gtttcccatt cttttgtacc 32448906
ctatataaac taagggtacc ctgccctaat cttttttcca acaacttcccc 32448856
aaataaccct tccttaciaa gaaagaagtc taagagaact ctctcatcta 32448806
aatatattta agtagaggca agcctgaaaa aaacacaaaa acctaaatgg 32448756
tgttaggctg tggttcacct attctcatgg cacctcaaat taatggcttg 32448706
ggtgttggtg taggtaacgc ttggcctgta tgttgaggta gtcactagat 32448656
aaaattctgg gcacaacatc cgtttagcaa ttgggcatac attctacaga 32448606
tttagccata acgttttgaa gctgattatt ttacagatca actaattaat 32448556
tcctctccct aactttacag atgagaaagc tcag

NLRC4 (NC_000002.11, GRCh37) - gDNA - 2026-03-14

