



IKBKG (NC_000023.10, GRCH37) - gDNA - 2026-02-28

gggggctgag ccccgccggc ccatttaatc ggcgggggcg ggggcgggcg 153775111
cctgggctga gcggaccgc ctcaggcgag gcgtgcgggg cggggcctcg 153775161
gccaccaccc ctcgctcggg cggggcgggg cgagggcagg tgcgcgcgca 153775211
tcccaggcca gccctgcct ctcgggcacc tgcgctggag gccggcccgc 153775261
cggctgcctg ccataccgc tgccgctgct ctgcatcccc aattccggcg 153775311
ggcacgggtg cagctccgcg tagtgctccc gaatccccc atcgccggccag 153775361
gccccgcccc tactgtccgg tttccccgcc tgccccggcg gcctcgcgcg 153775411
ctcgcggagg gctccacttc cgccggcagc gtggccacgc ctctctggg 153775461
ctgtccctcg gctcctgggc ggggccttct gccgcgccac tccccggga 153775511
accctcgcct gttcgcgggt caagccggcc ctattgggca gtctcttctt 153775561
gattcctccc ccggagaggg cggggcggcc gagcgccccg aggctagacg 153775611
ccgccgtccg agagacgagg gggcgtgtag gcggtgacgc cctgcaaagt 153775661
ggccggcgtg cttatcatta ccgagcttc gcgggcctgc agagcctggc 153775711
ggactcagac ttctctccgg agcgggatgc ggccctaccg cggcctcaca 153775761
cttctcgcgg gcttcccag ttctcggggg cggggcttgt gtttttactt 153775811
ccggatccca cagctatgac accggaagcc ggaagcgtgg tagggaagg 153775861
cgaccgcgaa actgggactt tctcggagcg ccggggccct accagcgttc 153775911
acagtccgcc gctcccaccc ttctcacgtc tgacggactc tgctgacagg 153775961
tgtggtcctt tccccaaag acagggttc atccgtgggc gttccgccgc 153776011
ctccgaaact tccccggac gttcaggctc cccctcttt tttgggccc 153776061
AGCCCGTTCC TGCTCCGCGC TTCTGGAGCA CTGGCCAAGG CGGGCCGATT 153776111
CAGGACCCAG GTTACTTGGG CGGCGAGCTG GACTGTTTCT ACTCCTCCCT 153776161

CCTCCTCCAC TGCGGGGTCT GACCCTACTC CTTGTGTGAG GACTCCTCTA 153776211
G TTCAGAGAC ATATTCTGTT CACCAAAC TT GACTGCGCTC TATCGAGGTC 153776261
GTTAAATTCT TCGGAAATGC CTCACATATA GTTTGGCAGC TAGgtatctg 153776311
at tcatatg cctgtttgct cgttttgcaa gacaacatct gcctatcgtc 153776361
atactgtttc tgtgatctga gaatgaatgg gctctcctgg cacattagag 153776411
gaatagcacg gaggtcacta tagctggagc agagtgaggg aggggagcac 153776461
agttggagag gaagggatgg ggaacccgat ggtacagggc cttgtaggcc 153776511
g ttgtaggga gattggcttt tacgcagaag gcaacgggga tccatggtag 153776561
ggttctcagt agaggaggaa tgtgatcggg attacgtctt aactgatcgt 153776611
ttctagcagt ggtggggaga acagaccata gtgggcaagg gtaaaagaag 153776661
ggtggcgtgg taagaggtaa ttgcagtaat ccagctcaga gacagtgtctt 153776711
tgagcatttt attattggaa atttcaaaaa tgtacgaaaag tagaaaaatg 153776761
agtatagtaa atcttttttg tttgtttggt tttgagagat ggagtctcgc 153776811
tctgtcgc cc aggctggagt gcagtggcat gatctcagct cactctaacc 153776861
tcctcctcct gggttcaagc gattctcctg cctcagcttc ccaggtagct 153776911
gggactgcag gcgtgcgcca ctacgccag ctaatttttg tatttttagt 153776961
agagacgggg tttcactata tgttggccag tctggtcttg aactcctgac 153777011
ctcaggtgat ctgcctgcct cagactccca aagtgtctggg attacaggtg 153777061
tgagccactg cgctcggcca gtatagtaaa tcttacattc acagctacca 153777111
acttcaacaa ttgaaggtat caacttctga ctaattttgt ttatatccct 153777161
cgcaatcctc tcccattatt attttatttc tttttcttc tttctttctt 153777211
tttttttttt ttttgagaca gaatctcgtc ctgtcaccag gctggagtgc 153777261
agtggtgtga tctccacca ctgcaacttc cgcctcctgg attcaagcga 153777311
ttcttctgcc tcagccgctg ggactacagt tgtgcaccac cacgcccagc 153777361
taatttttgt attttttagta gagatgggggt tcatcatgt tggccaggat 153777411
ggtcttgatc tcttgacctt gtcacccgcc cgcctcggcc tcccaaagtg 153777461
ctgggattac aggcattgagc caccgcgcc gccctctttt tttgagacc 153777511
agtctcactc tgtcgcccag aatggagtgc agtggcacga tcttggctca 153777561

ccgcaacctc catctcccag gtttgagcga ttctcctgcc tcagcttccc 153777611
aaatagctgg gattacaggc atgcaccatc actcccagct attttttttt 153777661
tttttgtatt tttggtaaata acagggtttt gtcattgttg ccaggctggg 153777711
cttgaattcc tgacctcaag tgatccactt gccatgacct cccaaagtgc 153777761
tgaggattaca ggtgtgaacc accatgcctg gccaccacta ttattttcaa 153777811
taacagcttg agatatcatt agcatgtcac acagttcatc catttaaagt 153777861
gtacaattca atggtttggt gtatgtatat tcacaggaca ttttcgtcac 153777911
ccctcaaaga aacccatac cctttagctc agcttatctt cccctcagcc 153777961
ctaagtggca ctcccagca atctttaatc cactttatgt ctctgtggat 153778011
ttgcctgttg tagacatctt atataaatag actcatacaa tgtttaatct 153778061
tttgtgactt gtttatttct cagcatatct tcaagatttg ttcatgttat 153778111
agcatgtgga tgtactagat tttgtttatt catagttagt ggacatttgg 153778161
gttgtttcca ctctctggct gctatgagta atgctgctac aagcattcat 153778211
gtggacacat gtgttttcat ttctctccgg tatataccta ggagttttcc 153778261
cattatttgg aggtgaattc agacatcatc tttaaacatt taagtgtgcc 153778311
tctctctaag acaggactct gaaaaacaac cacaatatca ttatgacacc 153778361
taaaatagtt aatgttaatt gctcagtgtg atcagatcgg ttgggggata 153778411
cattttaaca ggatttcttg atggattaga tgtgctcttg tgtgtgtgtg 153778461
tgtgtgtgtg tgtatgtgtg tgtgtgtgtg tgagagagag agagagaatc 153778511
aaaaaagact tttgacagct ggaggatgga ttcgccatca gctgataaca 153778561
aagaaggcct tgggtagatc tgggttttgg ggactgtcgg aggtcttaga 153778611
gaggttcgtt ttgagaaggc tactagataa ccaagtagaa atgtcgagtt 153778661
tgataaatga atgtggagtt tagaaaagag gtctaattaa gcatcaagat 153778711
tgagagttcaa ggcatgagac tggacagaat tcctgtggga gtgaatgaag 153778761
ttacagagaa gaagatgtcc taggacagag ccctggggca gcccaacatg 153778811
aaggatggga acccagttag agtgcctggg caggagtagc cagcaagata 153778861
gggaggaaac caggagaagg ggctgttctg aaagccaagg gtggagtgca 153778911
gtggcacaat ctgagctcac tgcaacgtcc gcctcctggg ttcaagcgt 153778961

tctcttgctt cggcctcccc agtagctggg actacaggcg cgtgtcacca 153779011
cactctgcta attttttgta tttttttttt ttgagatgga gtctcgctct 153779061
gttgcccagg ctggagtgca gtggcgcgat cccgggttca cgccattctc 153779111
ctgcctcccc ggttcacgcc attctcctgc ctcagcctcc tgggtagctg 153779161
gggctacagg cgcccgtac catgcctggc taattttttg tatttttagt 153779211
agagacaggg tttcactgtg ttagccagga tggctcaat ctctgacct 153779261
catgatccac ccgtgtcggc ctcccaaagt gctgggatta caggcgtgag 153779311
ccaccgtgac cggcaatttt tttttttttt ttagtagag gcagggtttc 153779361
accgtgtag ccaggctggc ctcgatctcc tgacctcatg attggccccg 153779411
ctcggcctcc caaagtgtg ggattacagg tgtgagccac tgcgccccgc 153779461
cagacatttt aatctcacag ttctggagac tagaagtcca aaaccaaagg 153779511
gtagcaagc acacaccctc aaaggctcta agagggcaat cctcccttgc 153779561
ctctccaag cttctgcccc atttattcct gggcttgtgg ctgcctcact 153779611
ccagtctccg aggcagtccc gacatggcct cctccccttg cgtctccctc 153779661
tggcttctct cttctgtctc tcataaagac acgttgttgg atttagggcc 153779711
caccacgctc acccagaatg atctcatctt gagatcctac atctgcaaag 153779761
acccttttcc cgaatcacat atgtttcagg ggtagaaca tgggcatatc 153779811
tttccggggg gctaccattc agcccactac actggatgag gggccggtac 153779861
cctccacttc tcctgcttgg aggtgtgtag gggatcagga ttcccagcat 153779911
actgacatct ccctccaaa acagtcttgt cccgactctc ccatctctgg 153779961
tgaaattctt ctatttccag cctggagcta ggccttttca agtcccacat 153780011
gggtggtcca gcacctccct ttggaatggg agtatctgct accccttaga 153780061
ctgaaaacc ctttagcat cctgatacac taggtgaatt atcagcattc 153780111
tgtttaaaat gtagccccag aactcatagg ctttttctgc tgggtaagga 153780161
tgtgggtctc ctgtgactcc cctgctgcct ttctcttca gCCCTTGCCC 153780211
TGTTGGATGA ATAGGCACCT CTGGAAGAGC CAACTGTGTG AGATGGTGCA 153780261
GCCCAGTGGT GGCCCGGCAG CAGATCAGGA CGTACTGGGC GAAGAGTCTC 153780311
CTCTGGGGAA GCCAGCCATG CTGCACCTGC CTTCAGAACA GGGCGTCCT 153780361

GAGACCTCC AGCGCTGCCT GGAGGAGAAT CAAGAGCTCC GAGgtgagga 153780411
aagagtcagg ggatccagcc ctgctgaggg gaaggcgtct tctccccacc 153780461
tgcacctctg cgtttcctgg gcctgggggtg gggatgtgct gccctccctc 153780511
ttggtttcag gaagtagact ctgagatgca gattagcggg gaggaagttt 153780561
agcatgctct caggaccagt actgggaagg gaaaggaggg acaggggaag 153780611
aagccagga gggcagaggg agaagcacgc tgccgggtag gctccaggac 153780661
agccttgctg gatcttacag ggagctctgg agctggaatg aaccttcag 153780711
gttgaccaa catgtccagg cctctgtgtc cctgcactga gcactcatga 153780761
agtgctgtcc atcctgggac agggcagagt cggcgctggg aagaggcgtg 153780811
gtctgcccag agaggggggtg gggcctgtcc tggaaatggg cggggcatgc 153780861
cctggtagag gggcgtggtc tgtcttggga aggaaggtgc gtggcccca 153780911
caggcaacat tcctctgggg caatcccggc gcacacctca gcggaggtga 153780961
aggctgactt cccacacca gtggctggga ctggggagt ctttcctaga 153781011
ctgccatccg ggcgcccctc accctcttgc tgctcagctc caggtcgtca 153781061
tgggttcagg gctcagctgc acgctcctgc ccgcgccctg ggcgtgatgg 153781111
cacccccagc ccctgccatt ctccccctc accccctctc cctgccactg 153781161
ctctgcattg ccctgggtta gcctggcggg gccagggtggc acccgccata 153781211
tactcttgcc tttctgctgc gggggccttc taagcctcgg gtcccagagc 153781261
tgaggagg ggcgcatag actcccaca tggctcactg ggtgtggtgg 153781311
ggcctgtagc cttttttgtt tcatcctttg gttcctgctg gggactcagg 153781361
cctaagtgtc caccatcg tggaggaaa cacccttcc ttgcaggagt 153781411
catccctgag ctggcagctt caattggctc tccgtgtcct ggctggctgg 153781461
cagctcctgg gcgagggtggc atgtgccgtg actactagag atcgtgtca 153781511
tgggcccact ccccgccctt ctttgctgga ctgtgggtccg agatgttatg 153781561
tggggctctg tgctgacaag tcacatagtc tgtaggcttc agagagtggc 153781611
tctggctgac acccctggg cagagacaag acccatgcct gcgatgtgtc 153781661
tcctcttact gtcaaggcaa atcaccttct cttccatgga ggaaggggtc 153781711
agtgcagtca gcttgctgtc agggggctgc ttggtctcct cgacggtgag 153781761

gctgaattgg agaggccctg ctggagcatg gagaccaaac atgacctgcc 153781811
tgttccagga caggggtcccc cacctcagtg ccatcggcac ctggggctgg 153781861
agaatttctt tgtacgttgt aggggtgtgga gcagagtccc tggcctgtac 153781911
ctgctagatg ccagtagcac ctgtcctggt gtgacaacta acaatatccc 153781961
cagatattta ttgccaaatg acccctgggg gatacagttg tccctggtga 153782011
gaccactgt attgggatct tcagagcact ggtgcacaga gaggtgacag 153782061
ttagactggg ggcttctgct catccccagg agagtgtctt attgaggggg 153782111
acttgagggg gagtgttgca ggccagctgt gcagggaccc tggcacagcg 153782161
tatggcgccc ttgcttccct tccaggctgt gtgttcagtg cagcagcttc 153782211
cctcgggctc cagggacaca aggaggcctc aaggctgtat tgactcccc 153782261
tgctccgcct gacctgagct ttgtgggtgg caggtgaaac ttggtagctc 153782311
catgtgtcag gccctgggcc aagcccctaa gggcccagaa gatgtctgtc 153782361
ccccaagatg tacatgctta tgtccatgga ggaggctgta cttagaatgt 153782411
tgaggagag attcacgaag aagttgcatg tctctagtgt gtgactccac 153782461
tagtgtgaga catgtccaga agtggccaat ctgcagaggc agatgcagat 153782511
gaggaggggt ctgggggagc gactgcttat ggggtcccgg aactgttctg 153782561
gaattagata gtgcggatgg ttgcacaacc tgatggatac accgaaaact 153782611
gctgaattag ttaaaatagt gaatttgatg tcatgtgaat tttacctcag 153782661
ttcagaacat tttttaaag acaagttgcc agccaggtgc agtggctcat 153782711
gcctgtaatc cgagcacttt gggaggcca ggcgggggga tcacctgagg 153782761
tcaggagttt gagaccagct tggccaacat ggtgaaacct catctctact 153782811
acaaaaatta gctacagacg tggtaggggg cacctataat cccagctact 153782861
tgaggaggct aggcaggag aattgcttga acccaggagg tggaggttgc 153782911
agtgagctga gatcgcgcca ctgcactcca gcctgggcca cagagcgaga 153782961
gtctgtctca aaaaaaaga caagttgcag atgagctgag ctttgggcag 153783011
agcaagcggg attctgatgg ggggtgatg ttgcgctcgt cagcaggcaa 153783061
tagttagttg gttgagggtt ttgatcacgg ggtagctact gcctgcccc 153783111
ttttatccag ctctgtagtt gctatagagt tgctagaacc ttggcacatc 153783161

acttatcagt tttgtcacct cagatggctt cttcactact tgggggtgtct 153783211
cctgggtgtg gggctctcct tcctgtggcc tctgctgact gcctggcact 153783261
ggcacacatg ctctggtgag gggaggacca gcggtttttc ccgtttgttt 153783311
tctgcttcct cgtttaaccc tcctcgtcct gtaagatgaa tgttcttgtc 153783361
tctgttcact atgcagatga ggactttgag gctcagagac gccactaact 153783411
tgcctggtcc aagccttttg ggcctctcag gctgcagcca gcaatgctgc 153783461
agtgaagttt gcctgggagg ctgaccctag gagtctgcag gcgtgttagg 153783511
acccccgatc tagaagacag cagagatgta ggccaggag gaccaatacc 153783561
gagcatctga gggcaggcac acctcagact gaccagaata caaatgaatt 153783611
cgagtcactt acaaacaag tggcataagg ccaggcacag tggcccatgc 153783661
ctataatccc agcactttcg gaggccgagg tgggaggatt gcttgaggcc 153783711
aacgatgtga gaccagcctg ggcaacatag caagacctg tctctacaaa 153783761
aataaaaatt caaaaaagt gcatthaaca catacttttt ttcttttttt 153783811
tgagacagag ttttgctctg tccccaggc tggagtgcaa tgggtgtgatc 153783861
tcggctcact gcaacctcca cctcccagg tcaagtgctt ctctgcctt 153783911
agcctcccaa gtagctggga ttacaggcgt gtgccaccac accgggctaa 153783961
tttttgtatt tttattagag acggggtttc accatgttgg ccaagctggt 153784011
ctggagctcc tgacctcagg tgatccaccc accttggcct cccaaagtgc 153784061
tgggattaca ggcatgagcc acagtgcctg gccaacacgt acttttaagt 153784111
gaagctgatg tgtttgggtg ttttttcttg cagaaagtga ggggcattag 153784161
tgtaaaggat tttggaagtg tttaaagaaa caaaaggag tgttgagacg 153784211
ccatccacc ctgagagaag ctgcgtggtg ttatggcggg tgggggcacc 153784261
aggatgggtg gccccacttc tggcctctga cttcctgagc ctcaggccca 153784311
tgtgggcccc ggaggggccc ggcaggccgg gctgcccagc tcccctccac 153784361
tgtcccctct gccaccagAT GCCATCCGGC AGAGCAACCA GATTCTGCGG 153784411
GAGCGCTGCG AGGAGCTTCT GCATTTCCAA GCCAGCCAGA GGGAGGAGAA 153784461
GGAGTTCCCTC ATGTGCAAGT TCCAGGAGGC CAGGAAACTG GTGGAGAGAC 153784511
TCGGCCTGGA GAAGCTCGAT CTGAAGAGGC AGAAGGAGCA GGCTCTGCGG 153784561

GAGGTGGAGC ACCTGAAGAG ATGCCAGCAG gtagtcgggg cagggccagg 153784611
ttctgaaaac ccgcggtgac gccagtgttc cacaagggaa cccgtggtcg 153784661
gggtcccca aagcaccctg gggctcagtg ctgtgccggg agggctcggg 153784711
actcagaaaa gccgtcacac tcccagttcc ggtttattac aaggaaagga 153784761
cacaggttac ggtgagcгаа ggctcagggc gcacagggcg ggctccagga 153784811
gagaccaggc gtgagcttca gcggctcctc gcccagggga gttgtgcaga 153784861
cggcacctgt ttctttcggc aacagtgtgg gacagcgagc acggagtcac 153784911
aaccgggaag ctacccccag ccgtggcggc cggggttttc acggggggtg 153784961
ggccgcgtgg gcaccgagcg cctgcgtggc caaccctggt cactcggctg 153785011
tagccaccag aggtccagct gtgtggccca aggctcccc cataaatcgt 153785061
gtcattagca cagaccgcct ggtttcaggg tctttgtgtg tgggcttggc 153785111
tgatcgcagg atcctggcga tggtagtcag gaaggggccc tgctcccttt 153785161
gaggggcaag gtggagagaa gtgctggaga ggagacttgc tggcgggtac 153785211
ctggcacttg ccacagccag gctccactcc cctggggaaa ggcgtggatg 153785261
gtgggctgtg cacgccgctc cactcagggc ttagagcgcc tggcttaagg 153785311
cgttgatttc ctgtgtggga agtggatgag ttttctacag ctgccgtgac 153785361
caagcaccac agactgcggg gccgaagcca cagaaacgcg tggcctcccg 153785411
cttctggagg cctggaggct gagctagcgg tgggtgcggc aggggtgggct 153785461
ccccgccagg gccgcgaggg agctgccttc caggcctctc cacggcgccc 153785511
ggggccgccc gctgcacctc tccagcctcc atctccgtca tcctgtggcc 153785561
ttgtccccgc gggcctctgt gcctgtcctc ctcttttgac aagaacaccg 153785611
gagatacaca aaggtacaca aaagcgggcc tttgttcaag ctggcaaaaag 153785661
agatcttctt cagaaacccc tgcttgccggg ggagagagct gagctccgtt 153785711
cccgccccag cagaggcggc ctggccttgc gaagggagaa ggagggagtc 153785761
gggagggggc gagtgcaggc tcaggtgaaa gatgacgggg cagccagcgt 153785811
ccttgccgcg aggccagccg tgtgtgggag ctgccggtgc ttaccaaggt 153785861
tgggatgctt ccgtcccgtg gagactggga gactgggccc cgcgcctcct 153785911
gaggtttccg tttccaagga gtggctgcgg gccctcggg aaagcccctg 153785961

ggttgtgggt gctacacaga tgtctcaaag ggacagggtta agccctttgt 153786011
agtaaatgct gtcagaaagg gaggtcaggt gttggccgga acagacagta 153786061
catgctctgg gcagccctga gcgtttccag acgggaactc actcaaaaagg 153786111
gggctggggc gtcccagggg cgcggcctta ggctcccaga ggccccgcga 153786161
ggtgggtggcc ggggtgtcttc gggcaggggt ttgagtgcag tgtgcctgcc 153786211
gagaggttct gcagttcca gtgtttaaca aaattcagtg tccactcttg 153786261
atctgcacaa actctcccat cctggcggcc ccgggtgtgg actggggcct 153786311
gtgtttactt tgcctattc gtgtctggcc tccttttgtc ccaagtctca 153786361
gagagacgga gagagatccc ctgctggggc tgtagctgca aggccaccgg 153786411
gttcagccct cgaggcctgc ttgccggggc agtgactaag ccgttgacaa 153786461
cctcaaggca gctttgtgct ccttcgtctc tttggggatc tctttttgcc 153786511
ccatctgtgt gtcaccctgt ggacaggggt taaggtgggc agctggggag 153786561
ggttgggtgg cccttgggct catgaggccc tagggcacc aggtttgggg 153786611
gtgccgaggg caggaaaaaa ggcctcatgg cgcgcaggcc tcagccgctt 153786661
gcgggttgcc ccgggcttgc ggatggcagg agtgggcccgc tggggagaaa 153786711
gcagtgtga caggaagtgg ctttttatcc tgcagCAGAT GGCTGAGGAC 153786761
AAGGCCTCTG TGAAAGCCCA GGTGACGTCC TTGCTCGGGG AGCTGCAGGA 153786811
GAGCCAGAGT CGCTTGAGG CTGCCACTAA GGAATGCCAG GCTCTGGAGG 153786861
GTCGgtgagt cgggggagcc ggctccggag accccttcca gggtttcaa 153786911
aagcaatgag gtgggtttag ggcctccag ggtgctcctt gatgaggata 153786961
gaccggggca ggctgcgtaa acacgtcggg gcagacgtcg ggagaggtct 153787011
gggccaggca tccgggacct gggcccagc cggctctccg cactctgtga 153787061
ccctttgatg gagtttggat tatttcctta ggaggcattc tgggggcccc 153787111
gagcccacac ccacagtgtc tagttctctg gaaggacttc tgggaccggc 153787161
gcacagtcgc cctcgtggct gaggttgatg acagggaaaa aggcacaggg 153787211
caggagccgc cagggcagga gccgtggggg gagttggaga agccctgtcc 153787261
cagcctcccg ctgccctgcg agcggcacag tgagaagcgc ctcccacacg 153787311
ggccgtgttc ctgccaggg atgcccgcta gagactcagc gccctgggtg 153787361

tttactgggg gcaggtcctg tcagcgcct ctgccaggca ggtacctaaa 153787411
tccccgactc ccagcagcag agcgggtgct cacgtcaacc acgttcttcc 153787461
tacaaatggc ctaggtgcag ggaccgacct gaccactaga gaaagtgtca 153787511
ctgtggcaag ggaacttcac cagccaaggg ccaaccttgc cagccggtgg 153787561
cctcaggcct gctggttact ctcttttgca aaggggtctt ggttcttgtg 153787611
agtgggacca ttgggtcaaa gggcaggag gtttctgtgg ttctcattcg 153787661
gtcctgcttc tgccctccag acagatggat cagctgccag gggggcccca 153787711
gccatcccag cacagtaagc ggtcaagggt cacttggggc agccagcagg 153787761
gcagagggga ggggagcttg acccaggctc tgatgggcag agggaacccg 153787811
tgcaggggtg gggggcagta tgcaggcagg cgcggagggg agagccaagc 153787861
agccaggcct gccaggcaga gttgggtgta ctggagaagg gccgtgtctg 153787911
cctgtggcca gaggccacc aggacctgga cagatgcacc caccattgtc 153787961
cctgcagtga ggctgtgaa gggcttgggt tgggggatg aggccagacc 153788011
ctggaaactg gaggttaagg gagctgtagg ggggcagggt tgggaactga 153788061
gcatccgagc aggtcgtctg ggactccagc agagctctgg gcagcagcag 153788111
ggatggggcc gaggcccggt ctgcattgag ctcagtgctt gcacgcccag 153788161
gtgggcagtc tctcattttt ggaacagcag tctctcctga ccccctccac 153788211
tgagactgct tttgctgggg ccccagcag tccccagtg gaactccacg 153788261
ggcagttccg agggctcctc tcacctggcc ccagcactgc gggatgcagg 153788311
cgaccccatc cttttctcgg accaccccct tcccctgact tccaggtctc 153788361
cttgccatct gtacttggtc acctgctggg cccctgcatt gaagcaaaca 153788411
cgtcttaagc aaagctcctc acctgctgct cccacctggc cccctgcagt 153788461
tgtcctcgtg tctgttgacg gtgcctccac cctgccgcct ggcacagct 153788511
cgcagtcaca ggggtttcag agccgacccc cccccccgc ccacgccctg 153788561
cgcatagccc ctgccgtccc cccgttcgtc ctccctgagt ctgctctttc 153788611 [c.519-23A>C](#) [c.519-23A>T](#) [c.519-19 519-2del](#) [c.519-11C>G](#)
cccgtgccag [GGCCCGGGCG](#) [GCCAGCGAGC](#) [AGGCGCGGCA](#) [GCTGGAGAGT](#) 153788661 [c.519-2A>G](#)
[GAGCGGAGG](#) [CGCTGCAGCA](#) [GCAGCACAGC](#) [GTGCAGGTGG](#) [ACCAGCTGCC](#) 153788711 [V199V](#)
[CATGCAGGGC](#) [CAGAGCGTGG](#) [AGGCCGCGCT](#) [CCGCATGGAG](#) [CGCCAGGCCG](#) 153788761 [Q205*](#)

CCTCGGAGGA GAAgtqagtc agcgggggcg gggccgcacc gcagggtctg 153788811 c.671+1G>C c.671+2T>G c.671+3G>C c.671+4_671+5del c.671+5G>A
tggttctaca cttgatctta gccgaaaggc tgagaagtgt cgggtccatg 153788861
gttctttctg ccttctgagg actccttcag attctgcctg tggctgtggg 153788911
cccattctgt cccttagcct tgctaacggt agaggcgacc atgatgacac 153788961
ccggtttgtc tttgatacag tcatgccatc tgctctccag accacgtttc 153789011
actgcgtgtc cacacgtggc cttttttgta gttttttttt cctagccact 153789061
aggatcatcag gggacttgtc ctttaaaacc ccttctaggc cagggtgctgt 153789111
ggctcacgcc tgtaatccca acactttggg aggccaaagt gggtagatgg 153789161
cttaagcccc ggagttccaa gaccagcctg ggcaacagaa agacaacaaa 153789211
aataccccc aaccccccg tctaccagca tccaatctgg gacctcaggt 153789261
tcctgtcctt ggcgtgcctt ttcagtctcc tttaatctag aacagttccc 153789311
ctgcctttct gagctgtttg tgaagttcac agttttgaac agtgcagggt 153789361
agttccattg tattattact attattttca agacagggtc ttgctctacc 153789411
gtccaggctg gagtgcagtg gcataatctc ggcttactgt accttccgcc 153789461
tcttggctc aagcgatcct cccaggtagc tgggactata ggcgcaggcc 153789511
agcacacctg gctaattttt gcatttttgg tagagggtggc gttttcctat 153789561
gttgcccggg ctggcttga actcctgagc tcaagcgatc ctctgcctt 153789611
ggcttctcaa agtgttggga ttatgggctg gagccaccgc gtctggccgc 153789661
gattttatta taaacattaa aaatactagc ttttaggaaa acgatattaa 153789711
ctgcctgggtg accagcccac caaagcctgc tttagagttg acggcctcag 153789761
gagtcctcac acagccttgg aagaccccat tccaggcctg tgatgcgagg 153789811
gaggaagga aggggtaga gttggaagca ggcagcaccg tggctggact 153789861
ggcatgaggt ggtttctcca gcaaaagctc cctttcctca gGAGGAAGCT 153789911
GGCCCAGTTG CAGGTGGCCT ATCACCAGCT CTCCAAGAA TACGACAACC 153789961
ACATCAAGAG CAGCGTGGTG GGCAGTGAGC GGAAGCGAgt gagtgcgacc 153790011
actggggctc tagggctggc cttgcctctt cctctccccg tggcctgaa 153790061
ccttgagaat gggtagacct gccttagact tgccttagac ctgtgtcagg 153790111
ctgcagctgc gacagctcag ggaagctgtg gggagatggc aaccccagga 153790161

tgttgctctc aggagtgtca gcaggccatc ttaatggggg gctgggcccag 153790211
agccttgggg tgctccctct gtggggctgg ggacgtcttg tctccatgga 153790261
cattccctct tgccagccat cgccatctgg cacctggctc agcttcccc 153790311
aagccaaggt aagccccaca gcatttccac cccagtgttg gctgggagcc 153790361
ttttcctagt ttgtcctcat cagacctaag ctggggtgca gtttgctagt 153790411
gatcacattt tagcaggaca ccgtcaatcg taagtgtacc cagaggagat 153790461
ttataaggac aaagcctgaa gccaggtcac atggggaaga gttagctaca 153790511
aaactggcca cttaatctct ggaggggggc gttgggtggg tgtgtctgtg 153790561
tgtgtctcag ggggctggag atgcctgcgt gggaggagtg cacctctgac 153790611
caggtggcag agtgaagga ctgagggctc tcagctgagc tgtgcacatg 153790661
gcgggcacag gaccggctgg ctgtgagtgg gtgtggcctg tggcctgtga 153790711
aggggtggag gagggctgtg gagctgggga ttctgggaag ggaatgtcgg 153790761
cccagctggg aggttgtacc agatgacctc agcggcctct tcagtcctga 153790811
aaaaaacctc agcatctcct ctgtcgtttt gggccgtgac aggacgcagc 153790861
catctccctg tgcacgctga gatcctgcaa tgggccctca aatcaggggc 153790911
tggcatcacc cagcctggtc agccagggcc actctttcat ccttctcagt 153790961
tcttctcagc cagcctcgcc ctgggctgac gaggtccgt cagctcccct 153791011
tgcccgtcct tagGGAATGC AGCTGGAAGA TCTCAAACAG CAGCTCCAGC 153791061
AGGCCGAGGA GGCCCTGGTG GCCAAACAGG AGGTGATCGA TAAGCTGAAG 153791111
GAGGAGGCCG AGCAGCACAA GATTGTGATG GAGACCGTTC CGGTGCTGAA 153791161
GGCCCAGgtg agggccctcc tctctgacct accctggcac tgggacctgg 153791211
agagtctctt tggcgtcttt tttttttttt ttgcttttgc tttttgagat 153791261
tgagttttgc tcttgttgcc caggctggag tgccactagt ggcacgatct 153791311
tggctcactg caacctctgc ctcccgggtt caaacaattc tcttgctca 153791361
gcctcctgag tagctgggat tacaggcgcc tgccgcatg cccgtctaata 153791411
ttttgtattt ttagtagaga cagggtttca ccatgttggc ccagctggtc 153791461
tcgaacttct ggcctcaggt gatctgcca ccgagctctc tcaaagttct 153791511
gggattacag gcgtgagcca ccgcacccgg cctctttggc atcattttgt 153791561

agtggccttt cgtaagcttc tgagccactt gtgctgctcc ttagacctct 153791611
cggtagactt ggcattactc gccgacgtat ctgtttcctc tgcgccgctg 153791661
ggggctctgg gaggacagca gtgggttctg ctttgttcct gtggtgccctg 153791711
gcgcagtgcc tgggtgggtg ctggcttggt gcgggcacat ccctttctgt 153791761
tggatttgcc agGCGGATAT CTACAAGGCG GACTTCCAGG CTGAGAGGCA 153791811
GGCCCGGGAG AAGCTGGCCG AGAAGAAGGA GCTCCTGCAG GAGCAGCTGG 153791861
AGCAGCTGCA GAGGGAGTAC AGCAAAC TGA AGGCCAGCTG TCAGGAGTCG 153791911
GCCAGgtggg cctctgagag cgtgcccgtg tgagcagtggt gtgcgacact 153791961
gggggggtcgc cagtgggtgac cccgcagtggt gtgcgacact ggggggttgc 153792011
cagtgggtgac cacaggagac ggatggctcc tgggtgttctg ggtagggct 153792061
cactgtggtc cctctcctct cacctgagct tccaagagct gctttgacac 153792111
tagtccagcc aaggagcttt acagaaatgc gtggcttgac tggacggttt 153792161
ctgttttcaa agGATCGAGG ACATGAGGAA GCGGCATGTC GAGGTCTCCC 153792211
AGGCCCCCTT GCCCCCCGCC CCTGgtgagt gagcgagaac tgggcctgcg 153792261
ggaggaggtg ggtggggagg gcaggtgctg cgccgcggga ggtcacagtt 153792311
cgaccttctt gttgctctct ggagacttga cggcgggagc tcgtgtaggc 153792361
caccatcgc gtagcccacc ccctccccg aggctaaggg aggcagtcgc 153792411
tggtagcggc ggctcctggt cttacatgag tggcctgtga gaccaggcct 153792461
gccattgaca gtccctgcaa gtctccgtcc ccctccatcc tccccttccc 153792511
tctgactctt ctcttttccc agCCTACCTC TCCTCTCCCC TGGCCCTGCC 153792561
CAGCCAGAGG AGGAGCCCCC CCGAGGAGCC ACCTGACTTC TGCTGTCCCA 153792611
AGTGCCAGTA TCAGGCCCTT GATATGGACA CCCTGCAGAT ACATGTCATG 153792661
GAGTGCATTT AGTAGGGCCG GCCAGTGCAA GGCCACTGCC TGCCGAGGAC 153792711
GTGCCCAGGA CCGTGCAGTC TGCCTTTCC TCTCCCGCCT GCCTAGCCCA 153792761
GGATGAAGGG CTGGGTGGCC ACAACTGGGA TGCCACCTGG AGCCCCACCC 153792811
AGGAGCTGGC CGCGGCACCT TACGCTTCAG CTGTTGATCC GCTGGTCCCC 153792861
TCTTTTGGGG TAGATGCGGC CCCGATCAGG CCTGACTCGC TGCTCTTTTT 153792911
GTTCCCTTCT GTCTGCTCGA ACCACTTGCC TCGGGCTAAT CCCTCCCTCT 153792961

TCCTCCACCC GGCAC TGGGG AAGTCAAGAA TGGGGCCTGG GGCTCTCAGG 153793011
GAGAACTGCT TCCCC TGGCA GAGCTGGGTG GCAGCTCTTC CTCCCACCGG 153793061
ACACCGACCC GCCCGCTGCT GTGCCCTGGG AGTGCCTGCC TCTTACCATG 153793111
CACACGGGTG CTCTCCTTTT GGGCTGCATG CTATTCCATT TTGCAGCCAG 153793161
ACCGATGTGT ATTTAACCAG TCACTATTGA TGGACATTTG GGTGTTTTCC 153793211
CATCTTTTTG TTACCATAAA TAATGGCATA GTAAAAATCC TTGTGCATTA 153793261
gtcgtgcgta tctttggcat agattctgag aagtgcacacc actgagcatg 153793311
ggcgatggcg tagatggtac ctgagcccc ttcctccttg gagcttggtt 153793361
tcccatctct cccaccccc tatttcccta gccttgccaa ggaggaggtg 153793411
ggaaagcccc tttgggtttt tgtcattcgc taggccatgc agttctctgt 153793461
taagagtgag cttaaacatc tttcctgagg cttaaggac ctttttagt 153793511
tctgcttctg aatgggctgc tcatatcata tataatatg tatatgtata 153793561
gttgtgtata tgtatgtgtg tgtgtgtgtg tgtgtgtgta tttttttttt 153793611
tttttttgag acagagtttt gctcttctcg cccagactgg agtgcagtgg 153793661
cgtgatctca gctcactgca acctctgcct cctgcgttca acctattctc 153793711
ctgcctcagc ctccctagta gctgggacta caggcgctg ccaccacgct 153793761
cggctaattt ttgtattttt agtagagatg gggtttcacc atgttggcca 153793811
ggctggctct gaactcctga cctcacgtga tccacctgcc ttggcctccc 153793861
aaagtgcctg gattacaggt gtgagccact gtacctggcc aatttttcta 153793911
tttttagtag agatgggggt ttcagcactt tggccaggct ggtctcaaac 153793961
tcctgacctc aggtgatctg cctgcctcgg cctcccaaag tgctaggatt 153794011
acaggtgtga gccactgcgc cccgctgggc tgcctatata ttttatccgt 153794061
ttttctactg ggttatcttt tgttgctcag ctttttagaaa ctctttgtcc 153794111
atgagcagga ttgggtttgt ggctgtgata gaaattgcag atatcttttc 153794161
ctgctttgac ctgctacta gtgtttcttt gttttttgtt ttgagataag 153794211
gtctctgtca cccgggtggg agtgtagtgg cacaatcaga gctcactgca

IKBKG (NC_000023.10, GRCH37) - gDNA - 2026-02-28

