



PSMA3 (NC_000014.8, GRCh37) - gDNA - 2024-12-21

tacacactga cgtattaata ttagggagta aaaaaaatgc tgatgcccta 58710610
tttacaatcg gattaaaatt caaacactt caagatttgg tctcctgtgc 58710660
acttgttctc ttcctgtcat tcttccccac ttaatcatta tgagaggcca 58710710
ctctgacgtg acagttccca gcgcaagcca agttttttac tgttccctaa 58710760
accactgtct tttgttacct tatttttagtt taaatatcac tcactcagaa 58710810
agtcattccc tgagcacact gcctaaagtt agtacctcca ttgtctatta 58710860
aagcactcct tcttcttact attttgctta tttattgta cctatttatt 58710910
cccactgaat ggaaattaca ttagaaatgg gggatgctc tgttcacggc 58710960
tttttcttga acacgtggaa tatactagcg ctcaaaaaat atctttaatc 58711010
agacttatct ttaactctta ccaaaaagcg ttatactcat agaaagagca 58711060
ctaatacttc cgtaaaattc taagctgaat tcaaagacga taccctttaa 58711110
gtgaaacttc acgagagcct gagcacaagg aggtgaagtg gatgccatca 58711160
agattctggg tcagggtcgg gacgcggagg aagacaggtt acttcgcgcc 58711210
tactgctttt tctacttttt gtgagagtat accagcatct ctccctttgg 58711260
cttaaagaaa gaataaagtg aggagagaat aataatataa aagataaata 58711310
ataattccaa ggaaaggaat agagcagctt ctgagatacc acgacgcaa 58711360
gcggtcctaaa gtacgcgaac cgaaggagga gcctttgctt tcccccaacc 58711410
cgcctccatt gcttctgcac atgcgcgccg ccagcctctc gcggcccgcct 58711460
tttttcccac aatactctc gtctctggggg ccggagccgc ggaacgagcc 58711510
acagagaaaa aggttattgg ttggcagttc agccaatgag cgggcctggt 58711560
ACTAGTTTGC GGCATCCTGT GGTATAGGGG AAGCGCTCCG GGCCTGGAAT 58711610
CCCTACGCGT CCCTTTGGGT TTAGCACGAT GAGCTCAATC GGCCTGGGg 58711660

tgagttcgcgt gtctgtcgggt gtaatagttt aacctaagga ttggggttga 58711710
agggaaactcg gacagaccac atggggttcg cggacccggg gtgctctgag 58711760
accgccttcg gctgggtggg ccatttgcag ctgtttggag accggtcgtc 58711810
tttatccctt atatgctagg cctgcgtctc aggtgaccgt gactcctgaa 58711860
gcttttcagc gcaggtgtag ccggcttggc gtcgcccag tgaggtttgg 58711910
agccgctttg gattgctgag tcactttctt cagccactta gggaaaccga 58711960
aagtggaaac tcgtggggct tgaaatagtg tgttctcttg agaaccaccg 58712010
aggcagtgag atttgggatt ccgggtctg gagatcgtgc tttttgtgga 58712060
ctgcgtttgc agttcctagg gtgctgctga ttcacaggcc ttctctgtct 58712110
ttaagtgtgc agatcattga ccgctcagtt taagagtcac tggaaatcct 58712160
gtcggaaacag aactaataaa aatggtctga aaaacaatct gatgaatcct 58712210
tcagtttttc ctttctcgtt tttcctatac aaattaccta acagcgttg 58712260
taggcattta ttccgtaaac gtttaaattg ttacttagga acttaacagc 58712310
ttcagacttt tcatagactg ttgaggattt tgcagtggga cttgttaact 58712360
tgtttggctt tcctttgtta aacgtattgc atatgtgcag tcagtttact 58712410
ccttttatgt acttctctat atagaaaata cagtttctaa aagatttatt 58712460
ggttatttgc actagagtta ttgaataatg agtttctcag ttctcaatt 58712510
tctacttctt aacaagattc tcatgctcag ccttaagttc aagtaccggt 58712560
gttctaaatt tgataatagg caacttatgt ctggaatggt ttaatccatt 58712610
cagttatgaa tgctaaagt ctgccatact tttcttggat aagtaaatgc 58712660
tcaatattaa atctttagc aaactgactt tgcaattata ttaatattac 58712710
cttgaattaa tagtatttca ttctacaaac cttttaaaga atacttgata 58712760
atgtaaccat gtgggatatt ttagtaacaa tggtagggtt aatgatctgg 58712810
gtttaaacaga tcaggaaaca gactcagaaa gtaccactgc tgaaggcttt 58712860
tcttctgtct tcatttctcc caagaactcc agatacgaat atttgtttgt 58712910
ctgcttgaca tgtctgttca cttgatcgtt taatagtcatt ttcgtactgc 58712960
atgtgaaagt agagctctgg gtttctcct caccttgcca ttttgcattc 58713010
actacagtct tcagctcagt gaatggtcat atgaaaaaat ctgttattca 58713060

tctttaattc ctttttttac tttactccca gaaccaacgc tttagcaagt 58713110
ttatTTTTTTTt atTTTTtattt tgTTTTgagac ggagtcttgc tctgTTGCCA 58713160
ggctggagtg cagtggcacg atcttggctc actgcaacct gtgcctccca 58713210
ggttcaagca attctcctgt ctCAGCctcc cgaagagctg ggactacagg 58713260
tgCgcaccac cacgcccagc taatTTTTtGTt atTTTTtCGtA gagatgaggt 58713310
ttcaccatgt tggccaggat ggtctccatc tcttgacctt gtgatcagcc 58713360
cgCctcaccC tcccaaagtG ctgggattac aggcatgagc catcacgcct 58713410
ggcctagcaa gtttattttt attattttta tattttactc tactctcaaa 58713460
aaatattccc ttctacctct tctctcgtct aagctactac cgctatcttt 58713510
ggaacacctt atctttgctt ctgTTgttct ctctacagct tattttccgc 58713560
ataaagccag aatgatgttt ttaaaaatat agatgatacc actccccctg 58713610
cttaaatttc tcattgcatt tagaataaaa tacagagtcc tttttccatc 58713660
ctggaagaca caacataatc tggccctcag ctacctcact aacacagttt 58713710
actcttcttt ctgctgctta cagtgcctgg gacacagtga ccttatttct 58713760
gtttcttgac tgtgctagcc ttatttctac cctaagatct ttgtGCCAAA 58713810
tgtcaagaag acttttccct catatcttaa atggctagct ccttgtcatt 58713860
taggTTTgac tcagcctaaa tataactgcc cagaaggcct tccctgatga 58713910
tgtagtctgt agtagttcat tgctttactc ttttattttc atcttagtgc 58713960
cttttctgat ttactgctgt acctctagca cctagattca tgtctgatgt 58714010
gaaactgaag gacttaatga atgagtatac ctttgtattc cgtatagtaa 58714060
cataatagat actcattaac tgcttggTga atgccgaatg atttgtttga 58714110
agtcttttag tttgttaatg gcagagttat cgttacaaat ttaaatgttc 58714160
gaactccagt gctggttcta ctgccccata ttaatctttt tcaaaaatga 58714210
gttttGtagt ctgggtgaaa agtgttctga cttcacctgg gacctgtatc 58714260
cattactctt caatagctga aatcgaaggT atatagcttt atcttagcta 58714310
ctgTTgctgc tctgacaagt ttccctttcc tctcttgaaa gcaaggctt 58714360
tgTTgggata taacaggttc ctgatgtttc agccatttag aggggaagaa 58714410
actgatggT cattactgcc aaagatacaa gcttactgtt gcccttttct 58714460

ccttaagTAT GACCTGTCAG CCTCTACATT CTCTCCTGAC GGAAGAGTTT 58714510
TTCAAGTTGA ATATGCTATG AAGGCTGTGG AAAATAGTAG gtaagaaaca 58714560
tttaaccagg tattacatgt ctccctttat tttatatatt tttggcgatt 58714610
aggctttggt atgttacttt ggtacaaatt agtatatgtc cccaaatctc 58714660
aatttattca tttccagatc tctttctagg ccagatgctt tccatgagcc 58714710
ccagtcctat atttctcgtt gattccagga ttatccactt agattttcca 58714760
tgttgcagag tgtataaatc acattcatta tcatcttttt gttttccatt 58714810
ttcaaattct tgatttgat cataggcttc ctccagccatt aggtttgtga 58714860
ccttgttatt ttttatttct catacatctt gtgttttaaa tgtcttatgc 58714910
aattagtcac atgttcgatt cagcaaagat tttttctatg tctgtttctg 58714960
ttttgagacc tgagtctcac tctgtcacct aggctagagt gcagtggcac 58715010
gatcttggct cactgcaacc tccgcctcct gggttcaagt gattctcttg 58715060
cctcagcctc cccagtagct gggattacag gcatgtgcca ccatgcccgg 58715110
ataatTTTTG catttttagt agagacgggg ttttgccacg ttggccaggc 58715160
tggtctcaaa cccctggcct caagtgatcc gctcacctcg gactcccaga 58715210
gagtagcccc agtcctatat ttctcgttga ttacaaagag ctgggattat 58715260
aggcgtgagt cactgtggcc agcctaaata cgattttaaa aagtcagatt 58715310
tatgcaaata tgaggaaata tctttaaaaa attgaaacct taaaaacgaa 58715360
tgtgtttttt cctgaatgaa gaaaaaatgc agccgggctg ggtggctcac 58715410
gcctgtaatc ccagcacttt gggaggctga ggcgggcgga tcacctgagg 58715460
tcaggagttt gagaccagcc tggccaacat ggtaaaacc tgtctctact 58715510
aaaaaataac aaaatacaaa aattagccgg gtgtgatggc acacgtcgta 58715560
gtttcagcta cttgggaggc tgaggcagga gaatcacttg aacctggcag 58715610
gtggacgttg cagtgagcca agattgcacc actgcactcc agcctaagca 58715660
acagagactc tgtctcagaa aaagctagga ttttaaaaaat gagacgtagt 58715710
ttcactcttg ttgccaggc tggagtgcaa tggcacaatg ttggctcacc 58715760
gcaacctctg cctcccaggc tcaagcaatt ctctcagcct cccaagtagc 58715810
tgggattaca gacatgcacc accatggccc gctaattttg tatttttagt 58715860

agagacaggg tttctccatg ttggtcaggc tggctctgaa ctcctgacct 58715910
caggtgatcc gcctgcctca gcctcccaaa gtgctgggat tacaggcatg 58715960
agccacggcg cccggcctaa aagtcttct ttttaaagat gtattaacct 58716010
gtcctttgat actacacca aagtgaacaa atgctagttt cttattttaa 58716060
aaaaaaatgt ttatttattt taaaaaagag gcatggctc actcactatg 58716110
ttgcctcggc tggctctgaa cttttgggct caagtaatcc tcctgccttg 58716160
gcctcccaaa gtgatgggat tacagggtg agtcactgcg cctggcttat 58716210
tattcctttt ttttaaaaa aactttttt gggggcagga cataggatct 58716260
cgctttgtca cccaggctgg agtgacgtg tgtgattaca gcttactgca 58716310
gactcgacct cctggctctg agctattct ctcctcagc cccacaaggt 58716360
agttgggact acaggcatgt gccaccacgc ctggcaaatt tttttagag 58716410
acagggtttc accatgtggc ccaggctggt ctcaaactcc tgagcccaag 58716460
tgatccgcct gcttaggctt cccaaagtgc tggattata ggtgtgagcc 58716510
accgcacca gccgaagtct ttgaattct atgaaaataa ttttgacctc 58716560
gaagactgcc tgaaaggatt tcagagattt ccagattttc aagaatgttt 58716610
taaacagtgt ggaagatgtt gagttgagat aattaagaca ggcttcctgc 58716660
tgggcgtgag ccacgcctgt aatcctagca ctttgggagg ctgaggcagg 58716710
tgtattgctt gagctcagga gttcgagacc agcctgggca acatggtgaa 58716760
atcccgtctc tactgaaaat acaaaaaatt agccgggcat ggcagtgcgc 58716810
gcctgtaatc ccagctactt gggaggttga gacaggagaa tcacttgaac 58716860
ccgggagatg gaggttgag tgagccaaga tcacgccact gtactccagc 58716910
tggggcaaca gagcgagact ccatctccaa aaaaaaaaaaaa aaaatagggg 58716960
cagagtttca aatggttggc ctggctggtc ttgaactcct ggcctcaggc 58717010
aagcctttca cttgggcctt ccaaagtcct gaggttacat tctgacctgt 58717060
actgcttgag ttcaactaag tttgcaaacc ttttggggaa attcatttaa 58717110
ataggcagta gtgaagagga aatgtattct agcatccagg ataacctcaa 58717160
agacatggaa tcaaaaatga acatgaggtt tttgaagggt gacagtgagg 58717210
taaccagtag agtacagaat ttataacagg aaattgaata tgctcagggg 58717260

gttctgccag acccttagga gtttaaactt gcaaggggag ccatggaaga 58717310
cacctaaagt gttggggaag gagtgtcaga aattcctaga aaatttggtg 58717360
tgtgcatctg ttgttcattt ttctgggagg aaatgccata gtttcatcag 58717410
atnttaagag gcctgtgaat aacacaattc ccctgctttt tagattgtgg 58717460
atcccttttt agattctgac tatggcaaaa tgaaacacag ctaggaatta 58717510
ggctggtcct agattaaacg gattagagaa gtagaaaaga tgggtgtagta 58717560
atctaggcct gaaattataa ggatcccaat gctggtataa ttattgtaaa 58717610
gaagtggaca tgaaggaaat tttgaagaaa aaaattaata gtaaatagaa 58717660
gctcaacatg gaggatgtag agcttgggtga tgctattatc caaaacagag 58717710
aagttgtgcc ggtagtccca gctactgagg ctgaggtgag aggattactt 58717760
gagcctcaga cttcaattca atcttgggca gcatggcaag actccatttc 58717810
tttaaaatta aaaaaaagaa gaaagagaaa gttgagataa ttttaccaga 58717860
aaactgtaca atcaagcatt gcttattttg tctctattgt ttccgatcag 58717910
aactaccttt atcaaaaagg aatagaagaa taaagtgtaa cacattttca 58717960
tcttgaaatg gcaacaagta atttctccac attttacttg aggttgtgtg 58718010
tgtgtgtggt tgagacaggg tctcactctg ttgcacagac tgggtgtgcag 58718060
tggtgcaatc ttggctcact gcagccacca cctaactggg ctcaagcaat 58718110
ctctcacctc agcctcccag gtagctggga ctacaggcgt gtaccacat 58718160
gcctggctaa gccaggtttc gccatgttgc ccaggctcgt cttggactcc 58718210
tgggcttaaa agatcctcct gcctcagcat cccaaagtgc tgagattaca 58718260
ggtgtgagcc accatgcctg gtcttaagag gttattttta gatcttttta 58718310
ttttaaacag ttgtagcaga acatatattt tatttttata tacgtattag 58718360
aagcaatatg tttattatgg aaaaattgga agaaagagat gagcaaaagg 58718410
aagaataaat cataatcctt ctaccagag cagtcactgt taacttttta 58718460
gtttgtatct aaccttttat gtctgttatg taccattttt aatggacatg 58718510
aatttatgtc aacatttggt tataacatga ttatcataag ccagacactg 58718560
agccatattg tgtttcgta gcatcatttt tatacttaca tattaatata 58718610
tttttagtca aatgatgtac tagattctgg agggagggtc acatgatatt 58718660

tatatggatt taatgtattht attacacttht agtgtgttht ctcttcctgg 58718710
ttttcaaagt ttttaaggta tttggcatgc cttaaagttht acttatttht 58718760
tttttttgtht aaacttaagt ttatgaagtht tctthtatttht tcagttaaaa 58718810
aactgatttht cttctccttg tttcagTACA GCTATTGGAA TCAGATGCAA 58718860
AGATGGTGTT GTCTTTGGGG TAGAAAAATT AGTCCTTTCT AAACTTTATG 58718910
AAGAAGGTTT CAACAAAAGA CTTTTTAATG TTGATCGGCA TGTGGAATG 58718960
gtaaggtht gtttaaaagt ttcctthttht tcttgtccaa tttctthttht 58719010
agtaactgat tggaatagat cactgtgcag tcacaaaagt aatcagagca 58719060
agttactgca tttgtccagtht tcaactgtcca gtagaaaggc agcattctca 58719110
taaccttatt agtgatgggg gaaaaaccaa gttgctgaaa gaagagcagg 58719160
tgaggggagag ggctggggag tatgcgtaga aatgagatct tggcagcaca 58719210
cattactaat gaaggatata gcttgagagg tgaagaatct ttagctthtct 58719260
gtatctcttg tggggatcac tgtcaaagta aagatgcat cagatagcga 58719310
acaccttht ataaggtht acatcaggaa aggatgtht atgaaaagga 58719360
aaagtgaaca catccataat agthtcatag ggcatcactg aaattaagtht 58719410
attcatgcag ctggthtct aghthttagtht gactaaattht caagccaagc 58719460
catagataca tgactgtht atactaaagtht taccctacat agatggcaga 58719510
cttggcttag tgagaaccac tactgaaaga aaaaaaaaaa aaagaatcaa 58719560
atgattctaa ccctgccacc tgaaaaggaa aggaagaaag gagaatthtct 58719610
ctatattagg ttttatgctg ggagctcttht acataaatta ccttgttht 58719660
tcttgacaac ccagthtgaag ttatatcaat gtcattthtct tttttthttht 58719710
tttttgtht gagacagagtht ctggctctgtht caccagggc ggagthtgcagtht 58719760
ggcgccatct cagcttht cagcctctgtht ctctgggtht caagcgattht 58719810
tcctacctca gcctccaag thttagctgggac tacagtht cactacctg 58719860
cccagtht ttttatatttht ttagtht cagggtht ccatgthtggc 58719910
caggctgtht tcgaactcct gacctcaagtht gatccatctg cccgcctcag 58719960
cctcccaaag thtctgggtht ataggctgta gccactgtht ccggcctaat 58720010
gccatttht cagtht gaaaaaacagtht cagcaagtht agaaaagtht 58720060

ggattcaaac ttgggtctgc atgttactca agagcccttt ctaaataaaa 58720110
agacacctta tatgaccac atcgttcagc tgatagcttt cttatatcta 58720160
aatgagattt aatgttacac acaaacacaa aaagtactgg taaagtataa 58720210
ccagtaaacc ataaagctaa tttttttctt cttcaaagat tattttatct 58720260
caacaatatg tttctcctga acagatTTTT ttattttgct gcaaatgaca 58720310
ggattttatt ttattttttg agatggagtc tcaactctgct atccaggaag 58720360
gagtgcaatg gcgcatctc agctcactgc aacctctgcc tcccgggttc 58720410
aagcaattct cctgcctcag actctcaagt agctgggatt acagacatac 58720460
gccgccacac ccagctaatt tttgtatTTT tagtagagac ggggtttcac 58720510
catgttggtc aggctggctc cggactcctg aactccagtg atctaccgc 58720560
cttggcctcc caaagtgctg ggattatagg cgtgagccag cgtgcccagc 58720610
ctagcatttt attctTTTTa aaggatgaat agtattccat tgtgtatata 58720660
tacattttct ttttactgtt tttttgtgtg tgttgttgta cagatttttc 58720710
tcgtcaccca ggtactaagc ctaggacca atagttattt tttctgatcc 58720760
tcttcctcct cccaccctcc accctcaagt aggccccatt gtctgttggt 58720810
cctgtctttg tatccatgaa ttctcatcat ttagcttcca cttataagag 58720860
agaacatgtg gtttttgggt ttctcttctt gtattagttt gctaagaata 58720910
atgctgaaca gatttattat tgccagtgaa actgatatgt tttgatgaaa 58720960
cttgctacat tgtaacctag ctagtaggag gtgatcttgt attcttttat 58721010
gtactagcaa aagttaatat tttgaaaaaa attatgcatg catatatata 58721060
tgtatgtaca cacacacaga ggtcttgctc tgttgcccag gcttgagtgc 58721110
agtggcatga tcatagctca ctgcagcctt gcgctcctgg gctcaagtga 58721160
ttcttctgcc tcagcctccc aatagctgt gactacaagt gtgccatcac 58721210
acctggctaa ttttttagtt tttttaagag atatgatctt gctgtgttgc 58721260
tcaggctggg cttgaaactcc tgggctcaag cgatcctccc gcctcagctt 58721310
cttgagtgtc tgagattaca ggcatgagcc aatgtgccct gtcaacatta 58721360
gacattgaag agggctggag aaaattaaga cttaatatcc tccctccttc 58721410
cacagttgct atcttcaagt gatttgagaa ttatatgact ttacagtaag 58721460

ctttctctaa agcaacagaa gattctttaa gtgatgtaac ttactggcat 58721510
gggttacctt ggggaagcta ttctaaacac gcgtttcctt gtctgcaaaa 58721560
caagagtgat aatagtactt ggcacataca gttgttgtga ggtaaaaaat 58721610
tattatgcaa aatgcttaac atgtaatgag tgctcagtat ctcttagtaa 58721660
ttatcattat tactattact gggtagcgta ggaaaaaaag gctattaaag 58721710
attgtgatac cactttttaa ttctgtaact gtcctgggct agagggtttc 58721760
aaaaacttgg ttggtttatg gtaccttaag tgtctcagta gtttttctca 58721810
tggcttcctt aggccgaaaa tacctaagtg tttcatttat taagtattta 58721860
gatccaaaga acttagtggt tacatcctaa aaacttagta gccgtttttt 58721910
ttttttaa atacacatag tgaaaaatat ttttatttaa aaattaaaat 58721960
gttttatttt aagcaaccaa aatttctagt atatacactg cacaacctcc 58722010
caaatttggg tgtggccact gtcatttctt gttccacact gatttttgca 58722060
cagtacttac tttttttcac agcaaccact aacagccaag cttctcaaag 58722110
atgtggtggc attgaaagga atgtagtaaa acgatcta atgtcaaacgg 58722160
aactacttgg acatttttct ccaaacttag aatgtgccac actaggccag 58722210
gtgcagtggc tcacacctgt aatcccagca ctttcggagg ccaaggcggg 58722260
cggatcacct gaggtcgaaa gttcaagacc agcctgacca acatggagaa 58722310
accctgtctc tactaaaaac acaaaaatta gccgggcgtg gtggcgcag 58722360
cctgtactcc cagctactcg ggaggctgag gcaggagaat ccctgaacc 58722410
tgggaggtgg aggttgcggt gagccgcgat tgcaccactg tgctctagcc 58722460
tgggcaacaa gagcaaaact ccatctcaaa aaaaaagata tgccacacta 58722510
acatgtgatt tcactgcagt gcctgaggac ctctcggcac atacatagta 58722560
actgcaattc tgtttttgtt tttgtttttg ttttgagaca aagtctcatt 58722610
ctgttgctca ggctggagtg tagtggcgtg atctcggctc actgcagcct 58722660
ccgcctccc agttcaagtg attcttggg ctcagccttg ggagtaggta 58722710
ggattatagg tgcccggcac caaacctgac taatttttgt attttttagta 58722760
gggtttcac catgttgctc aggctggtt caaactcctg acctcaggtg 58722810
atccccctgc ctccggcctcc caaagtgctg ggatcacagg catgagccac 58722860

cgtgcccggc ctagtaactg cagttctaag ccgcaaatct tgaaagagga 58722910
atggttttatc attgtagttt attcagccaa taggctgaaa aaagatttgc 58722960
gattgtgcct tttagaacaa aacagttaca ggttgagtat ctctcgtcta 58723010
aaatgcttgg gaccagcagt atatcggata tttttcgatt ttggaatatac 58723060
tgcattatat actcatcagc tgagcatcct taatctgaaa attcaaaaatc 58723110
caaaaagctc tactgagcat ttcctttttt tttttttttt gagatggagt 58723160
ctcgcctctgt tgcccaggat ggagtgcagt ggcgcgatct cggctcactg 58723210
caacttccgc ctcccagggt caagcaattc tctgcctcgg cctcccaagt 58723260
aactgggatt acaggtgcct gcaaccacgc ctggctaatt tttgtatttt 58723310
tagtagagac ggcatttcac catcttggcc aggctggtct tgaactcgtg 58723360
accttgtgat ccacctgcct cagcctccca aagtgcctggg attacaggtg 58723410
tgagccacca ggtccggcct gagcatttcc tttgagtgtc atgttggcac 58723460
tcaaaaagtt tcagattctg aagcgtttta aatttcagat ttttggatta 58723510
gatatacctca acctgtaata actttagaga aaagaacaaa tttgggccgg 58723560
gcacggcggc tcacacccat aatcccaaca ttttgggagg ctgaggcagg 58723610
ctgatcacct gaggtcagga gttcaagacc agcctggcca acatgacaaa 58723660
accaaaccct gtcttacta aaaatataaa aattagccaa tcccagctac 58723710
tggggaggct gaggcaggag aatcccttga acctgagagg caaagggttga 58723760
agttagccca gatggtgcca ttgtgctcca gcctaggtga cacagtgaga 58723810
ctctgtctca aaaaaaaaaa aaaaaaaaaa tctgaccaag acccatggtt 58723860
tttattcgtt ataatgaggt agtggtagta aatcagggga agaggattta 58723910
tgatagaagt agtcctgaat attggccggg cacggtggct cacgcctgta 58723960
atcccagcac tttaggaggc tgaggcaggc agatcacgag gtcaggagat 58724010
caagaccgtc ctggctgaca tggtgaaacc ccatctctac taaaaataca 58724060
aaaaaattag ccgggcgtgg tggcaggcgc ctgtagtccc agctactcag 58724110
gaggctgagg caggagaatg gcatgaaccc aggaggcaga gtgtgaagtg 58724160
agcggagatc atgccactgt actccagccc tggtgacaga gcgagacccc 58724210
gatatcaaaaa aaaaaaagga aatgtcctga atatgaacat tggacaaagc 58724260

aatgaagtta tacttactaa atttctaaat tataatttca tactcaagca 58724310
tcaaaatgcc ttgtagagag acctttaagc caaaaaagtt tatttttgaat 58724360
ggtaatactt gttaaaaaaa tgtttaataa gtctttatta attgcagact 58724410
ttgatttgtg ataggaatgt gttcctctag taaattgggtg cttttttttc 58724460
agGCAGTAGC AGGTTTGTTG GCAGATGCTC GTTCTTTAGC AGACATAGCA 58724510
AGAGAAGAAG CTTCCAACCT CAGATCTAAC TTTGGCTACA ACATTCCACT 58724560
AAAAgtaagt tgataacata ttgaggaacc ttttggacag taatagaagt 58724610
ttattaataa gctcttctgc ttccctccat agCATCTTGC AGACAGAGTG 58724660
GCCATGTATG TGCATGCATA TACACTCTAC AGTGC'TGTTA GACCTTTTGG 58724710
CTGCAGg_laa gaaatthttgt gaattattca aaaggcagat ctgtactata 58724760 [p.H111Ffs*10](#)
gatatttatt atgttcccca gcatcttagc cttttacata cttaaaaaata 58724810
gaaactcgtc gataagtatt agggcaatga ttaaataaaa cagtgtacat 58724860
agaaactact tgaggctggg tgccatggct caagcctgta atcccagtac 58724910
tttgggaggt tgagggtgga ggatccctcg cgcccaggag tatgagacca 58724960
gcctggccaa cgcagtgaga acctatctct acaaaaaaaaa tttaaaattt 58725010
agccagggtgc agtatcacat gcctgtagtc acagctactt aggagctgct 58725060
tgagaggatc atttgagccc aggagttgaa ggctggaatg agctgtggcc 58725110
ataccactgt actctagctg gcgcaataga gactctgcct ctttaaaaaa 58725160
aaaaaaaaaa aaaaaaaaaa gttttcaata gtgaaaagga ctatatagat 58725210
ctgaagtgat tataaaacaa ggaactgata acaatgactt taatctgatt 58725260
ataataagct ctcggtgta gtccctgata ttcttaggta attttaaaaa 58725310
ttacgtctca caattcccat taggcacggt ttctctttct gttgaagtgc 58725360
tgatattttta ttgtggggta aagtggagat tcagctgcat aaagacctgg 58725410
aataggtata aatattcaaa tttggcttca cagagaagac ttgtgactag 58725460
atthttctaa aatgaaaaga catgthttggc ttatgactta aaacagtcaa 58725510
acatgthttgg tcaaaataat acatatacta acatctgagt gctcagctgt 58725560
agtcctacct ttgagttgth tatcatcagt catatttaat tactaagata 58725610
ttaaagaaaa cttgagthttt attctattgg taatattaca ttaggthttt 58725660

gtttttactt tttgagacag ttactgtcac ctgagctgga gtgcagtggg 58725710
gccatcatgg ctgactgcag ctttgacctg gctcaagcga tgctcctacc 58725760
tcagcctccc aagtagctgg gaccacagggc atgggccacc atgcctggct 58725810
aattaacaaa attttttttt gtagagacgg ggtctcacca tgctgccag 58725860
gctgacatta gtcattctta agcttctcag ttaaattaca ttatgaaaca 58725910
ctttgttttc agaccatgta aaataccttt caactgagct ctgagttcat 58725960
cagttaactt ctctactctt tttaaggag taagaatagt agagataact 58726010
ttttttcata actttttttt tgtttgttt gttttgttt gagatggagt 58726060
ctcgcctctg cccccaggct ggaatgcagt ggcacgatct caggtcactg 58726110
caacctctgc ctccccgggt caagctattc tcctgcctca acctcctgag 58726160
tagcagggat tacaagcacc tgccaccacg cccggctaata ttttttattt 58726210
ttagtacagt cagggtttcg ccatgttggc caggctggtc tcaaactcct 58726260
gacctcaagt gatccacctc agcctcccaa agtgctggga ttacaggcgt 58726310
gagccaccgc actgggccag agagaacttt tttagtaaac atctattggg 58726360
cactgagtta gtcataaatg tggagacaca ggtgtgaagt cacattgata 58726410
aaatattagt gatatgataa agggacaaca attagggaac ggactctttc 58726460
tggacaggag gcaaggaaga gtgtgagatg tagggagact tggtagttgc 58726510
aagcacagga actggtatga aaatacgtgc gccagagaga gttaagtatg 58726560
cttgggtgtg agagtatgag gtttagagat gatactgatg taggaagggg 58726610
tccagtcata taaaagtctg tgctccatgc tgattttctt caaagaaatg 58726660
ttgaaaggct ttaaaatagt gacaatgagc tataatcct gaaggataag 58726710
tctcatatcg gtagaaaatg gaaggaaatg acggtaggga tgggaattga 58726760
atagttaaaa tattccgcat ataagatgat gtgtaagatg ctgctgattt 58726810
cttttctact ctaaggcaaa tatagttgtc cttgggtatt tgtgggggat 58726860
tggtttttagg acctcccatg aatacaaaa tccaagggtg ctgaagtccc 58726910
tgatataaaa tggttaagta tttgcatata acctgtgcat atcctcctgt 58726960
atgttgtcat ctctagatta cttgcaatac ctaacacagt gtaaatagct 58727010
gttacctgt attgttttagg gaataatgac aagaaaatca cagttgttca 58727060

gtacagaagc aatgtttttt gaaagttttc tatctgtggt ttgttgaatc 58727110
cacagatgca gaactcatgg aaacagtgcc cactgtatgt cacaatttca 58727160
gaaaatcagt atttcataca atcagcta atgcctaattt gttgagcaca 58727210
gaaaaataca ctgaaccaat tctgattatt gcagagaaat gattggcagg 58727260
atattgggaa atagaatgaa ggggtggaaag aatttcacat ggattcagta 58727310
tactctccgt caggaatttt gttcccttga tctttttgtg tttatgcctt 58727360
atattattggg ccctctcata gttgtggttt tcatctatcg ttactccttt 58727410
ccctgtactg ctagactttc caggagacct tcatcagaaa gattaatact 58727460
aaacaaacaa aagctacatg aattttgaat aatctcatgt aatagtttta 58727510
attaattgaa accactgttt caaagtactt actgagttat atgtgtatta 58727560
gtaatttatc tcagaaagaa aatataactg cattttaaaa taattttttc 58727610
acaataactt ttatgttatt gccatggttt aagctgtttg tatactttca 58727660
tgagTTTCA TGTTAGGGTC TTACAGTGTG AATGACGGTG CGCAACTCTA 58727710 [N144S](#) [A147T](#)
CATGATTGAC CCATCAGGTG TTTCATACgt gagtaatttt gaatcatttg 58727760
aaattctatt ttagtttaat ggtatttcat tagcatttaa gtctcattat 58727810
aagattatat gaaattaaaa aaaaactcat tcaaggaaag taatttttct 58727860
tttttttttt tttaacaaca cctcttgtcc aacagaattt tttttttttt 58727910
cctttttggg ggaacagggg ctactgtgg cccaggctgg agcacagtgg 58727960
tgtgatcaca gctcactgca acctctgcct cccaggttca aacagttcct 58728010
ctgcctcagc ctcccgggta gctgggatta cagggtgtgca ccacctggct 58728060
aatttttttt attttttagta gaaacaggcc tttgccatgt tggccagact 58728110
ggtcttgaat tccagtcctc aagagatcta cccacctggg tctcccaaag 58728160
tgcgagtatt acaggtgtga gccaccaggc ccagccatgt tttcttatca 58728210
ttaataactg atacgaggca gaggaaagat tttttttcag tatgttattt 58728260
atagaaactg tatagtgc atagtatttt gaatatgtga ttttccttta 58728310
ttactataaa cactgtctta aaactgtatt taatgtcttt tttcctcatt 58728360
cttgcccagg ctggagtgca gtgacacaat catagctcac ttcagcctct 58728410
caactcctgg gctcaggcga tcctcctacc taagcctccc aagtagctgg 58728460

gactacaggc tcatgccacc atgcctagct aatTTTTgta tTTTTTggt 58728510
gtctatagag acaaggtctt tccacgttcc cagggctggt ctcaaactcc 58728560
tggccttaag cagtcctcct gccttggact cccaaaatgc tgggactaca 58728610
ggcgtgagca tcgatgtcca gccatgtcat ccTTTTtatt tTatttattt 58728660
ataagatgga gtgtcactct gtctcccagg ctggagtgca gtggctcgat 58728710
cttggttcac tgcaacctct tccgcctcct aggttcaagc aattctcctg 58728760
tctcagcctc ctgattagct gggattacag gcatgtacta ccatgcctgg 58728810
ttaatttttg tatttttagt acagatgggg ttttgccatg ttggccagct 58728860
ggtctccaac tcctgacctc aggtggtctg cccacccccg cctgccaaag 58728910
tgcaaggatt acaggcgtga gccacagtgc cggacctaat tttgtttcag 58728960
acagcgtctc gctctgtcac ccagactgga gtgcagtggc gccaaacctc 58729010
cacctcccca gttcaagcaa ttctgcctca gcctcccag taggctggga 58729060
ttagaagcat gcatcaccac acccggctaa tttttgtatt ttcagtagag 58729110
acgaggtttc accatgttag ccaggctggt ctcgaaactcc tgatctcaag 58729160
taatccgccc accttggctc cccaaaatgc tgggattata ggtgtgagcc 58729210
accttgcctt gccttccctt ttaaagagaa ggtttaaagtg tgatttctaa 58729260
gagctttccc taaattatta ccattttttt ttttttttga gacagagtct 58729310
tgctcagttg cccaggctgg actgcagtgg tgcaatcttg gctcactgta 58729360
acctctgcct cccggattca agggattcct gtgcctcagc ctctcaagta 58729410
gctgggatta caggcctgta ccatcacacc tggctaattt ttgtattttt 58729460
agtagagaca gactttcacc atgttgccca ggctggtctg gaactcctgg 58729510
cctcaagtga tccacgtgcc tcagattccc aaagtgctgg gattacaagc 58729560
actttgtgtg agccactgca cccggcctgt taccgtttct taactgtttt 58729610
cttatcctta catttttgtc gtttttacta attgaagaaa atgaagattc 58729660
ttaaataat tttgctgtaa cagaagtata tatgtgtaca tccttttttt 58729710
tttttttttt gatggagtct cactctgttg cccaggctgg agtgcagtgg 58729760
cgcggtctca gctcactgca acctctgcct cccagattca agcgattctc 58729810
ctgcctcagc ctctggagta gctggcatta caggcacctg ccaccacacc 58729860

tagctaattt ttttgtattt ttagtagaga cagggtttta caatgttggc 58729910
caggccggtc tccaactcct gacctgaggt gatctgcca ccttggcctt 58729960
ccatagtgct gggattacag gcatgacca ccacaccag ctgtgcatcc 58730010
ttatctttaa aaaaatttac aaaataataa aattgggggt ttagagtact 58730060
gaactcatag gaattaactt tatttctgtc tctcaggaat atataatttc 58730110
atttttcatt gtcatagtgc taaaatcttt tccgttcctg ttccccaaaa 58730160
tgtcttaaag tgtatatgat tacataattt acatattttt ggatatacct 58730210
ttattaaaaa tacaggttgt tttggaattg tttggtattt tagtattttt 58730260
gagcccttg gcatcatca gaatgtgttt gactatattt ttctatactt 58730310
gcttttaaaa gtcatttagc atcctttcac taggttatag aaacattagt 58730360
agtcattaat tacatatgat agtgtactaa ttcagtgatt atatatattt 58730410
ttttctaaat agGGTTATTG GGGCTGTGCC ATCGGCAAAG CCAGGCAAGC 58730460
TGCAAAGACG GAAATAGAGA AGCTTCAGgt aataattaat gcttgaattt 58730510
ttactatgct gtcacccctaa tgcagtgaat ttttatcacc acagacattt 58730560
cagtctaagg cagggatgtc caatcatttg gcttccctgg gccacacata 58730610
aaatacacca aactaatga tagctgatga gcttaaaaaa aaatctcatc 58730660
atgtgttaag aaagtttacg aatttgtgtt tggcccatg tggcctgtgg 58730710
ctggggaagc tcggtgtaag gatatagtgt ggtttgatgt tgagagtta 58730760
tgaagctgct aagtcactga atgggaaagc tggtaacata ttatctgtag 58730810
agttgtgta tacatccctt tatagattct gaataactgc tataaagcct 58730860
caatctagaa aaacacaact tttgatatga tttcacaaaa tccttgaaac 58730910
ctatttatga atctctgtga gctctagttt gaaaattttg tttaaaattt 58730960
tgagttaata aaaagttata tttttcctat attctttctt tggaacacag 58731010
cttttatgct tggctgtgct ccaccggttc tcttagcttt gctcctagcc 58731060
aggtaaggca taaagcctac actcttacga ctaccactt tttctttcac 58731110
aaaattcagc tattagtgtg aaaaagtttt cttaaaaact tggttttcct 58731160
tttagccatg cgttgatcaa cttaaagact tcatggatac tgtttcaata 58731210
ttattgatta cctgtcagaa actgcctaa aaagcaggca taccatttat 58731260

cagtgttttg gtaaaactgaa gtgagataca atttcacata catttaatgt 58731310
taatgctgta ctagaaccct gctcaactaa ttactcattc aacttattta 58731360
agaccagctt ctagaaaata cttattagtg cttggcattt atacaatgct 58731410
aagttctaga accccctata aaacctaatt tgtttcgtat tttagtaaag 58731460
ctgacaaaag gatccttagag gtcatttagc ccaagctcaa ctgcagatta 58731510
aacacactgc ataggaccac agaatcagct ggttctgaac agtatccaga 58731560
ccttatgagt cttagaccta tgttcttttc cattgcacac ttactagtat 58731610
gatgctaggt tcctatcttc tactcttttc cttttgtttt catctctcca 58731660
tactattata tggaaatttg aaaattagaa tatttatgtc agttgagggg 58731710
gattaccctt gtaatcctac cagtttggtg ggccaagttg ggaggactgc 58731760
ttgagcccag tagttccaag accaggctgg gcaaaagagt aagaccctat 58731810
ctcccaaac aaaatgttag cgaggtaggg tggtagctgc ctgtagtccc 58731860
agctacttgg gaggctgagg caggaggact gtttgagccc cagccaggag 58731910
ttgggggcta cagtgagcta tgatcacgcc actgcactcc agccagggca 58731960
acagagcgac accttatctc aaaaaataa aggaaattag aatatttaga 58732010
gcagttacta tctgtctttc tgtagttaa tcctagcaag gaatgggaaa 58732060
aacaataaat cccagagaaa aatcaagaaa aaaaaatcac ttaattgag 58732110
gaacactttc agtttgtagc aaaattatgc tgtgaatcag gtgttgcaaa 58732160
ttatggccca ctgcctgctt ttgtgtaagt tttattggaa cacagctaca 58732210
ttcagtccat ggctgctttt agaatacaac agtagacttt aacatttggg 58732260
acaggggaaca gaaaccagag ccatacagct aataaacttg aaaatattta 58732310
caagttgatg ctttacaaaa tccatctgct gaccctgct ctgtaccatt 58732360
gttctcttct gatggtctgt ttactaaaa ataaaaactt cacaaacatg 58732410
taaaaaatag atttgccatt taaaatgtgc ttttcaagtt tgacttttta 58732460
ggatgcaatt aattcactaa atacagaact taactaagga caaaaattta 58732510
aagatcagca ttctttccct tcccatcacg ctcaacttaa catgaagaac 58732560
tgtaaacatc ctaagcttac acaaaccta tctagttaga cttcagttaa 58732610
ccacttacac atccccctcc cccatgaact atttgaaaa agctgcaggc 58732660

gtaatattgg atccctaaat actttattct ccttatacca ttatcagacc 58732710
caagtatcat ctaatagtcc ataatacaac tgcctaagca gtttctacac 58732760
tgtcttttta actatttcaa actatcaagg ttcgcatttt cttccttaga 58732810
acttttagtc tttttcttcc ccaaaatatt tgagtccatg ccagttgcct 58732860
ttagttgtac ccaaataatg gtttgtctat ttcctaaaag tagtactctt 58732910
aaattttaat ttagtgttat ttttgttgtc attgttcctt cttcctcatg 58732960
tggttgtgca ggagagcct gagcatccag atttcaaaat taaaaataa 58733010
aagataatct agtttaatat atagtagttg aatcacctta agtctagact 58733060
gctgtatgag caccattat ctttactat attccatcat cccccaacat 58733110
atccacagta gatgaagggc agtttgctca aacattgttt tgatcctgtc 58733160
atgtctgttc agaaatgcct gtctattcag aaaccacgt ctaataacaa 58733210
aatcctggac tggttactat caaaaccaa caacatacag actcctcagc 58733260
taggccctag ggatattttt ctaccttgat ttccaaatgt tcattgaaag 58733310
aatgcttaat tctaatttg aaaaaagttt ttggcttccc acttctgctt 58733360
tacacgttca tctttcttga aatcaaatcc aatccaatct atattctaag 58733410
aacctgctca aatcttgggt cttcaaagct ttccttggtta ttttgcattt 58733460
ttgctttgaa tagttccacg aaggataact tcttactcct tccttcatct 58733510
ttctgtatct tgcatatagt aaatattaat gacttgtttg cattttgtta 58733560
tcctaacttg gctataaaga aaatcagatg tcttcaccag tcgttcaaac 58733610
ttcaggtctg cctacagatt catagatggc tgtggatttt tataattttg 58733660
tcacaaagt agtggttaact acaggttatc tcagaatatac ttttttggcg 58733710
tataaatttt tttcttttcc ttttttagac agtctctctc tctgtcgccc 58733760
aggctagagt gcagtggtg gatccccggt cactacaacc tctgcctcct 58733810
gggttcaaga gattcttagg cctcagcctc ccgagtagct agggttacag 58733860
gcgcgcacca cctccatgcc cagctctttt gtatttttaa gtagagacag 58733910
ggtttcacca tgttggtcag gctggctctc aacttctgac ttcaggcaat 58733960
ccggccgcct cggcctcca aagtgctggg attacaggca caagccactg 58734010
caccagcct ggagataaaa tttcaaaaaca ttaaaatag aatcaggaaa 58734060

cttcgattct ggtctttttc agacttttagg ttatttttctc tggttttata 58734110
tctgagtata aaagtgaaaa tagttattac acaagtggaa aatgttcttc 58734160
tgatgaacag tatacatttt attttctata gATGAAAGAA ATGACCTGCC 58734210
GTGATATCGT TAAAGAAGTT GCAAAAATgt aagttgaaat ttttcttacc 58734260
atccacaaaa atatttcatt tgacctttgc atatatatat tacattaatc 58734310
ctaagaagct gttttcctgt aaaataactt agtgtataat ttttagaagg 58734360
taaatttaac attctaagaa gcctcacgaa ggaagaaaat gtttttaagc 58734410
aatatttttt agtagtaatg aataggatgg gaaaaatagc ttgacaaaaat 58734460
aaactcctgt tacaggttaa ggacatatac cattaggggtc ttaatttggt 58734510
agctcccaac ttctcaaadc tcttaagtcc taataatagt aatcttaaga 58734560
ttgcctctat tgtaagaatg cttacaaact ttataggtta caactaatta 58734610
tttcaataca tgatccatga agctggctca tttatataat ctgctattta 58734660
tttgggaaag atatgtttca ctttttcagg tttattataa aagttcctat 58734710
aacaaggtaa gaagagcagt attacaaaac atttcaacaa ccagcttaag 58734760
aaaccctgaa tagtttatta caggtatata aagtagaata ctattaatat 58734810
gtaacaggta tttggacagt aaacaataaa aaagtcaatt aacctgggta 58734860
gtgatgtttc taaaattttg tgattctcta gatcaaagag tgtagacatt 58734910
tgggtattaca aaaagattcc aacaaaatac gttgtgtagc cagcttttta 58734960
gattcaaaaag ttatggataa tcgtaattca taacaactct aagtattcca 58735010
cattagaact acataaacia ggtctagtca atcacctgtc tgtatggtag 58735060
tgtatcaggt tttacatcta acaatacgtg gaagaaaaaa attccaatgg 58735110
gctctattgt ttaataaaca tactatttac atcacactca gagtctctta 58735160
ttaaccgggc catcattact gctactgcct ttaccctctc tgccacctcc 58735210
tcccctccgc cctcctagtt tcagttgtga agcaagcaga agccattcta 58735260
tgattgtcag ttaataatgg caacactagg aaccaacatg cagcagagct 58735310
gctaagaaag gaagtcagat atcttccttg aattgtatag tatgttatca 58735360
tgatatactc tgtttccttc accgaaccaa tcctttgaag tccttctgga 58735410
aatcagttct taccatcttt tatatttagg tataatggta gtcactctgt 58735460

aagtgttcca tgtaggaaa gccatccctt catcatttaa gaaaatggag 58735510
cagcatgtta tcttttactt agttgtagaa aatcaagatc ctctcatatt 58735560
atagcaaggt tttagaagac cctccaaaaa gtaaggatg taactcagtg 58735610
catagtatta gataaagcta tactctgcta ctgtacttaa tttgatactt 58735660
tttttttttt gagatggagt ctactctgt cgtccagact ggagggcagt 58735710
ggcacgatct tggctcactg caacctccgc ctcccgtgtt caagcaattc 58735760
tcctgcatca gcctctcaag tagctgggat tacaggcgcc caccaccaca 58735810
cctggctaatt ttttgtattt ttagtagaga caggctttac catcttggcc 58735860
aggctggtct tgaactcctg accttgtgat ccaccacact tggcctccca 58735910
aagtgctggg attacagatg tgaaccaccg cacctggcct cttgatactt 58735960
tttatgttac tttaatatgt tgcattgacag tgcctccttc tttgctgtaa 58736010
tttgaaggt actacaatgt gaaggccagg ttatgtggca tatatgcat 58736060
tataaaatgg acaaggagct taaaaagact actgccaaga agctataggt 58736110
tgaagagacc actaataatt gcaagcacat aaattagttt tttttttttt 58736160
atTTTTTTga aacagagtct cactctgttg cccaggctgg agtgcaagtgt 58736210
cgtgatctca gctcactgca gccctacct cctgggttca agcaagtctc 58736260
ctgcctcagt ttcccagta gttgggacta caggcctatg gccacctcac 58736310
ctggctaatt tttgtatttt tagtagagac gtgggttcac catggtggcc 58736360
aggatggtct cgaactcctg acctcatgat ccaccgcct ctgcctcccc 58736410
aaagtgctag gattacaggc acgagccacc atgtccagcc aattagttgg 58736460
ttttaaataat atttaagtta atggacaaaa tattctaaaa gggcacagtt 58736510
aatgacgcct cttcctagtg aatccgtgtt ctttatgagg tatcttttat 58736560
agttgtatct tttttttttt ctgagatgga gtctcgctct actgtagccc 58736610
aggatggagt gcagtagtgt gatcttggct cactgcaacc cctgcctccc 58736660
gggttcaagg aattctcctg ccttagcctc ctgagtagct gagattacag 58736710
gcgcccacca ccacacctgg ctgatttttg tttcttagta gagacagggt 58736760
ttcaccatgt tggccaggct agtctcgaac tgacctcaag tgatccatcc 58736810
gccttgggtct cccaaagtgt tgggattaca ggtgtgagcc actgtgcca 58736860

gccaaagttat atctctaaaag caatgtgcaa aaataaaactg aacttgagggtt 58736910
gattaggtat attcaacatt tgtcgggaga gtagatgttt cattttattt 58736960
cagtccctgt gtaatttgtc ttctctaagt ttaaatacta tgtagaatgt 58737010
gtctgtgtaa ttttatagat acttttatta tggatggaca ttctaatttg 58737060
tactgacttt gggctctgtga actacttcaa tgtttgagg ttacccaaaat 58737110
cttacctttc ccttttctat tctagAATTT ACATAGTACA TGACGAAGTT 58737160 y199c
AAGGATAAAG CTTTTGAAC AGAACTCAGC TGGGTTGGTG AATgtaagtt 58737210
atTTTTgtac atttatttgc cttaggaatg atctgtacca cagctaattt 58737260
acaactgagt gtccttttcta atataatgaa agctaaagca aatttactag 58737310
gttgtctaata gaagggaaag ttctgcttaa taattgactt aagttgtgaa 58737360
cacgttattt tttgaaacat ccatttcatg gttttaagat actatgctat 58737410
aaattaatgc tcaggattta taaatagcat aatttacttt catttccata 58737460
agaacttaat atgtaggcac atataatctc atgtagaagc agcacacaaa 58737510
aatattcgag tattactcat agtacaactt tgcaacctta ggtgagtcag 58737560
atatgtggat tgggtagatc ctatgggata ctgcaagtta caatatggta 58737610
ctcaatttaa aattcattta cacatgtggc ttaatttaca gTAACTAATG 58737660
GAAGACATGA AATTGTTCCA AAAGATATAA GAGAAGAAGC AGAGAAATAT 58737710 p.R233del
GCTAAGgtaa gccacagcac aaaaacttct cttggccagg tacagtcagg 58737760
gaatcactta gccaggagt ttgagaccag cctgagcagc acagcaagac 58737810
ccccatccct aatttaaaaa aaaaaaatt ctctaaccaa aattatgtgt 58737860
tgaataatat aaatagactg gggtggtttc tatgaaataa cactgagagt 58737910
tcagttgaac taaagataga aattttctag gttatctcta gtgggtaaag 58737960
ttgccttggg tccaaaaaaa aaaaacttgg gaggtttaga ctgcaaagag 58738010
tttttttagga cttttaatac tttaaattt tgttcttttt tttttttttt 58738060
tttttgagac ggagtcttgc tctgtcacc aggctggagg gcagtggcac 58738110
catctctgct cactgcaacc tctgcctcca gggttcaagc gatcctcctg 58738160
cctccgcctc ccaagtagct gggattacag gaacatgcca ccatacctgg 58738210
ctacttttgt atttttggct tcaccaataa tacagagacg ggttttcacc 58738260

aggctagttt caaactcttg aactcacgtg atctgcctac tttggccccc 58738310
gtaaagtgct gggattacag gcatgaacac tgcaccaggc ctcttaagta 58738360
tatattctat caaagataca gtcattgcat gttagagcaa catttgctta 58738410
attaactttg cttgggtatc ttattctgaa actgttcatt cagttacaag 58738460
tagaggaatt taaccactta attcaggttg ttgtagctta acttgcccac 58738510
aggtgtggga tataacaatt ttaaaaatca attttaaaca cctgttttct 58738560
cttaacagGA ATCTCTGAAG GAAGAAGATG AATCAGATGA TGATAATATG 58738610
TAACATTAC TCCAGCATCT ATTGTATTTT AAATTTCTAC TCCAGTCCAA 58738660
TGTAACTATT TAGCCCTGGA TTATACATAC TGTCCAATTT TCATTA AATT 58738710
TTTGTCTTAT AAactattgaa gtttgggttaa tatctgcttt acaaaaattgg 58738760
tgggggtaaa tgaggacatt tactcagtat taaaatatag atttatgact 58738810
actgaaaaat tccctgggta aaatgctgca gaattaattc caagactgta 58738860
gattaattca aagcccatc ttcactcactc aactagaatt tacagatcat 58738910
attctcctgg gcttttgtac aaaaagcacc taccaactta gtggacaaat 58738960
aactgatacg gtttcccact ttcatatgaa gtaactgggtg gtcactcagtc 58739010
actgttaatc tttagatgtg atacagatga cagatgtttc agttttggat 58739060
aatttttcaa aaactgacc tctcaaaaa agacccttca atacatgagt 58739110
caaggatggt tttgcttttt tcctttattg tgggtgagggg cggatttaag 58739160
gatcaataaa gtccttattc tgtcactaaa aaaatttctt gatctctaaa 58739210
gattaaaata aaaataccaa catcagacag ctttcatggt aaaaatcaga 58739260
atztatgta aagtgtctctg taaacagaac tgttactaag tgggaataaac 58739310
agtactgtgg ccgataagaa taacttgaag ctgaaaagca gtactcacag 58739360
caggaacaat ttgaactcag gccatgtata cacaccctct agtggactca 58739410
tgccagtgtc actccattga agtgttgtgc tttcctaaga aggtaatcta 58739460
gccactgaat ttgggtgcag ggtatcgctg gactttgagc atttgtgtag 58739510
tttaaatagc aatcattat acctgagtat taatagctaa ctactacaca 58739560
aacaactcaa aaccagtaat gtcatgtcat taccatggct tcttttatgt 58739610
aacattatct gctacatttt accactcaaa atatatttaa aatatgtatt 58739660

ttaaaatata ttagagcata tggctcaagc aatcctccca cctcagcctc 58739710

ccaagtagct gg

PSMA3 (NC_000014.8, GRCh37) - gDNA - 2024-12-21

