

PSMA3 (NC_000014.9, GRCh38) - gDNA - 2026-11-04

tacacactga cgtattaata tttaggagta aaaaaaatgc tgatgcccta 58243892
tttacaatcg gattaaaatt caaaccactt caagatttgg tctcctgtgc 58243942
acttgttctc ttcctgtcat tcttccccac ttaatcatta tgagaggtca 58243992
ctctgacgtg acagttccca gcgcaagcca agtttttac tgttccctaa 58244042
accactgtct tttgttaccc tattttagtt taaatatcac tcactcagaa 58244092
agtcattccc tgagcacact gcctaaagtt agtacctcca ttgtctatta 58244142
aagcactctt tcttcttact attttgctta tttattgtta cctatttatt 58244192
cccactgaat ggaaattaca ttagaaatgg gggtatgctc tgttcacggc 58244242
tttttcttga acacgtggaa tatactagcg ctcaaaaaat atctttaatc 58244292
agacttatct ttaactctta ccaaaaagcg ttatactcat agaaagagca 58244342
ctaatacttc cgtaaaattc taagctgaat tcaaagacga taccctttaa 58244392
gtgaaacttc acgagagcct gagcacaagg aggtgaagtg gatgccatca 58244442
agattctggg tcagggtcgg gacgcggagg aagacaggtt acttcgcgcc 58244492
tactgctttt tctacttttt gtgagagtat accagcatct ctccctttgg 58244542
cttaaagaaa gaataaagtg aggagagaat aataatataa aagataaata 58244592
ataattccaa ggaaaggaat agagcagctt ctcagatacc acgacgccaa 58244642
gcggctcaaa gtacgcgaac cgaaggagga gcctttgctt tccccaaccc 58244692
cgcctccatt gcttctgcac atgcgcgccg ccagcctctc gcggcccgct 58244742
tttttcccac aatactcctc gtcctggggg ccggagccgc ggaacgagcc 58244792
acagagaaaa aggttattgg ttggcagttc agccaatgag cgggcctgtt 58244842
ACTAGTTTGC GGCATCCTGT GGTATAGGGG AAGCGCTCCG GGCCTGGAAT 58244892
CCCTACGCGT CCCTTTGGGT TTAGCACGAT GAGCTCAATC GGCACTGGGg 58244942

tgagttcgct gtctgtcggt gtaatagttt aacctaagga ttggggttga 58244992

agggaactcg gacagaccac atggggttcg cggacccggg gtgctctgag 58245042

accgccttcg gctgggtggg ccatttgcag ctgtttggag accggtcgtc 58245092

tttatcccct atatgctagg cctgcgtctc aggtgaccgt gactcctgaa 58245142

gcttttcagc gcaggtgtag ccggcttggc gtcgccgcag tgaggtttgg 58245192

agccgctttg gattgctgag tcactttctt cagccactta gggaaaccga 58245242

aagtggaaac tcgtggggct tgaaatagtg tgttctcttg agaaccaccg 58245292

aggcagtgag atttgggatt ccggggtctg gagatcgtgc tttttgtgga 58245342

ctgcgtttgc agttcctagg gtgctgctga ttcacaggcc ttctctgtct 58245392

ttaagtgtgc agatcattga ccgctcagtt taagagtcac tggaaatcct 58245442

gtcggaacag aactaataaa aatggtctga aaaacaatct gatgaatcct 58245492

tcagtttttc ctttctcgtt tttcctatac aaattaccta acagcgcttg 58245542

taggcattta ttccgtaaac gtttaaatgg ttacttagga acttaacagc 58245592

ttcagacttt tcatagactg ttgaggattt tgcagtggga cttgttaact 58245642

tgtttggctt tcctttgtta aacgtattgc atatgtgcag tcagtttact 58245692

ccttttatgt acttctctat atagaaaata cagtttctaa aagatttatt 58245742

ggttatttgc actagagtta ttgaataatg agtttctcag ttcctcaatt 58245792

tctacttctt aacaagattc tcatgctcag ccttaagttc aagtaccggt 58245842

gttctaaatt tgataatagg caacttatgt ctggaatggt ttaatccatt 58245892

cagttatgaa tgctaaagtt ctgccatact tttcttggat aagtaaatgc 58245942

tcaatattaa atcttgtagc aaactgactt tgcaattata ttaatattac 58245992

cttgaattaa tagtatttca ttctacaaac cttttaaaga atacttgata 58246042

atgtaaccat gtgggatatt ttagtaacaa tggtagggtt aatgatctgg 58246092

gtttaacaga tcaggaaaca gactcagaaa gtaccactgc tgaaggcttt 58246142

tcttctgtct tcatttctcc caagaactcc agatacgaat atttgtttgt 58246192

ctgcttgaca tgtctgttca cttgatcgtt taatagtcat ttcgtactgc 58246242

atgtgaaagt agagctctgg gttttctcct caccttgcca ttttgcatct 58246292

actacagtct tcagctcagt gaatggtcat atgaaaaaat ctgttattca 58246342

tctttaattc ctttttttac tttactccca gaaccaacgc tttagcaagt 58246392

ttatttttt atttttattt tgtttgagac ggagtcttgc tctgttgcca 58246442

ggctggagtg cagtggcacg atcttggctc actgcaacct gtgcctccca 58246492

ggttcaagca attctcctgt ctcagcctcc cgaagagctg ggactacagg 58246542

tgcgcaccac cacgcccagc taatttttgt atttttcgta gagatgaggt 58246592

ttcaccatgt tggccaggat ggtctccatc tcttgacctt gtgatcagcc 58246642

cgcctcaccc tcccaaagtg ctgggattac aggcatgagc catcacgcct 58246692

ggcctagcaa gtttatttt attatttta tattttactc tactctcaaa 58246742

aaatattccc ttctacctct tctctcgtct aagctactac cgctatcttt 58246792

ggaacacctt atctttgctt ctgttgttct ctctacagct tattttccgc 58246842

ataaagccag aatgatgttt ttaaaaatat agatgatacc actccccctg 58246892

cttaaatttc tcattgcatt tagaataaaa tacagagtcc tttttccatc 58246942

ctggaagaca caacataatc tggccctcag ctacctcact aacacagttt 58246992

actcttcttt ctgctgctta cagtgcttgg gacacagtga ccttatttct 58247042

gtttcttgac tgtgctagcc ttatttctac cctaagatct ttgtgccaaa 58247092

tgtcaagaag acttttcctt catatcttaa atggctagct ccttgtcatt 58247142

taggtttgac tcagcctaaa tataactgcc cagaaggcct tccctgatga 58247192

tgtagtctgt agtagttcat tgctttactc ttttattttc atcttagtgc 58247242

cttttctgat ttactgctgt acctctagca cctagattca tgtctgatgt 58247292

gaaactgaag gacttaatga atgagtatac ctttgtattc cgtatagtaa 58247342

cataatagat actcattaac tgcttggtga atgccgaatg atttgtttga 58247392

agtcttttag tttgttaatg gcagagttat cgttacaaat ttaaatgttc 58247442

gaactccagt gctggttcta ctgccccata ttaatctttt tcaaaaatga 58247492

gttttgtagt ctgggtgaaa agtgttctga cttcacctgg gacctgtatc 58247542

cattactctt caatagctga aatcgaaggt atatagcttt atcttagcta 58247592

ctgttgctgc tctgacaagt ttccctttcc tctcttgaaa gcaaggtctt 58247642

tgttgggata taacaggttc ctgatgtttc agccatttag aggggaagaa 58247692

actgtatggt cattactgcc aaagatacaa gcttactgtt gccctttct 58247742

ccttaagTAT GACCTGTCAG CCTCTACATT CTCTCCTGAC GGAAGAGTTT 58247792

TTCAAGTTGA ATATGCTATG AAGGCTGTGG AAAATAGTAG gtaagaaaca 58247842

tttaaccagg tattacatgt ctccttttat tttatatatt tttggcgatt 58247892

aggctttgtt atgttacttt ggtacaaatt agtatatgtc cccaaatctc 58247942

aatttattca tttccagatc tctttctagg ccagatgctt tccatgagcc 58247992

ccagtcctat atttctcgtt gattccagga ttatccactt agattttcca 58248042

tgttgcagag tgtataaatc acattcatta tcatcttttt gttttccatt 58248092

ttcaaattct tgatttgtat cataggcttc ctcagccatt aggtttgtga 58248142

ccttgttatt ttttatttct catacatctt gtgttttaaa tgtcttatgc 58248192

aattagtcac atgttcgatt cagcaaagat tttttctatg tctgtttctg 58248242

ttttgagacc tgagtctcac tctgtcacct aggctagagt gcagtggcac 58248292

gatcttggct cactgcaacc tccgcctcct gggttcaagt gattctcttg 58248342

cctcagcctc cccagtagct gggattacag gcatgtgcca ccatgcccgg 58248392

ataatttttg catttttagt agagacgggg ttttgccacg ttggccaggc 58248442

tggtctcaaa cccctggcct caagtgatcc gctcacctcg gactcccaga 58248492

gagtagcccc agtcctatat ttctcgttga ttacaaagag ctgggattat 58248542

aggcgtgagt cactgtggcc agcctaaata cgattttaaa aagtcagatt 58248592

tatgcaaata tgaggaaata tctttaaaaa attgaaacct taaaaacgaa 58248642

tgtgtttttt cctgaatgaa gaaaaaatgc agccgggcgt ggtggctcac 58248692

gcctgtaatc ccagcacttt gggaggctga ggcgggcgga tcacctgagg 58248742

tcaggagttt gagaccagcc tggccaacat ggtaaaaccc tgtctctact 58248792

aaaaaataac aaaatacaaa aattagccgg gtgtgatggc acacgtcgta 58248842

gtttcagcta cttgggaggc tgaggcagga gaatcacttg aacctggcag 58248892

gtggacgttg cagtgagcca agattgcacc actgcactcc agcctaagca 58248942

acagagactc tgtctcagaa aaagctagga ttttaaaaat gagacgtagt 58248992

ttcactcttg ttgcccaggc tggagtgcaa tggcacaatg ttggctcacc 58249042

gcaacctctg cctcccaggt tcaagcaatt ctctcagcct cccaagtagc 58249092

tgggattaca gacatgcacc accatggccc gctaattttg tatttttagt 58249142

agagacaggg tttctccatg ttggtcaggc tggtctcgaa ctcctgacct 58249192

caggtgatcc gcctgcctca gcctcccaaa gtgctgggat tacaggcatg 58249242

agccacggcg cccggcctaa aagttcttct ttttaaagat gtattaacct 58249292

gtcctttgat actacaccca aagtgaacaa atgctagttt cttattttaa 58249342

aaaaaaatgt ttatttattt taaaaaagag gcatggtctc actcactatg 58249392

ttgcctcggc tggtcttgaa cttttgggct caagtaatcc tcctgccttg 58249442

gcctcccaaa gtgatgggat tacaggtgtg agtcactgcg cctggcttat 58249492

tattcctttt ttttaaaaaa aacttttttt gggggcagga cataggatct 58249542

cgctttgtca cccaggctgg agtgcagtgg tgtgattaca gcttactgca 58249592

gactcgacct cctggtctcg agctattctc ctccctcagc cccacaaggt 58249642

agttgggact acaggcatgt gccaccacgc ctggcaaatt ttttgtagag 58249692

acagggtttc accatgtggc ccaggctggt ctcaaactcc tgagcccaag 58249742

tgatccgcct gcttaggctt cccaaagtgc tggtattata ggtgtgagcc 58249792

accgcaccca gccgaagtct ttgaattctt atgaaaataa ttttgacctc 58249842

gaagactgcc tgaaaggatt tcagagattt ccagattttc aagaatgttt 58249892

taaacagtgt ggaagatgtt gagttgagat aattaagaca ggcttcctgc 58249942

tgggcgtgag ccacgcctgt aatcctagca ctttgggagg ctgaggcagg 58249992

tgtattgctt gagctcagga gttcgagacc agcctgggca acatggtgaa 58250042

atcccgtctc tactgaaaat acaaaaaatt agccgggcat ggcagtgcgc 58250092

gcctgtaatc ccagctactt gggaggttga gacaggagaa tcacttgaac 58250142

ccgggagatg gaggttgcag tgagccaaga tcacgccact gtactccagc 58250192

tggggcaaca gagcgagact ccatctccaa aaaaaaaaaa aaaataggga 58250242

cagagtttca aaatgttggc ctggctggtc ttgaactcct ggcctcaggc 58250292

aagcctttca cttgggcctt ccaaagtcct gaggttacat tctgacctgt 58250342

actgcttgag ttcaactaag tttgcaaacc ttttggggaa attcatttaa 58250392

ataggcagta gtgaagagga aatgtattct agcatccagg ataacctcaa 58250442

agacatggaa tcaaaaatga acatgaggtt tttgaaggtt gacagtgagg 58250492

taaccagtag agtacagaat ttataacagg aaattgaata tgctcagggg 58250542

gttctgccag acccttagga gtttaaactt gcaaggggag ccatggaaga 58250592

cacctaaagt gttggggaag gagtgtcaga aattcttaga aaatttgttg 58250642

tgtgcatctg ttgttcattt ttctgggagg aaatgccata gtttcatcag 58250692

attttaagag gcctgtgaat aacacaattc ccctgctttt tagattgtgg 58250742

atccctttt agattctgac tatggcaaaa tgaaacacag ctaggaatta 58250792

ggctggtctt agattaaacg gattagagaa gtagaaaaga tggtgtagta 58250842

atctaggcct gaaattataa ggatcccaat gctggtataa ttattgtaaa 58250892

gaagtggaca tgaaggaaat tttgaagaaa aaaattaata gtaaatagaa 58250942

gctcaacatg gaggatgtag agcttggtga tgctattatc caaaacagag 58250992

aagttgtgcc ggtagtccca gctactgagg ctgaggtgag aggattactt 58251042

gagcctcaga cttcaattca atcttgggca gcatggcaag actccatttc 58251092

tttaaaatta aaaaaaagaa gaaagagaaa gttgagataa ttttaccaga 58251142

aaactgtaca atcaagcatt gcttattttg tctctattgt ttccgatcag 58251192

aactaccttt atcaaaaagg aatagaagaa taaagtgtaa cacattttca 58251242

tcttgaaatg gcaacaagta atttctccac attttacttg aggttgtgtg 58251292

tgtgtgtgtt tgagacaggg tctcactctg ttgcacagac tggtgtgcag 58251342

tggtgcaatc ttggctcact gcagccacca cctaactggg ctcaagcaat 58251392

ctctcacctc agcctcccag gtagctggga ctacaggcgt gtaccaccat 58251442

gcctggctaa gccaggtttc gccatgttgc ccaggctcgt cttggactcc 58251492

tgggcttaaa agatcctcct gcctcagcat cccaaagtgc tgagattaca 58251542

ggtgtgagcc accatgcctg gtcttaagag gttattttaa gatcttttta 58251592

ttttaaacag ttgtagcaga acatatattt tatttttata tacgtattag 58251642

aagcaatatg tttattatgg aaaaattgga agaaagagat gagcaaaagg 58251692

aagaataaat cataatcctt ctacccagag cagtcactgt taacttttta 58251742

gtttgtatct aacctttat gtctgttatg taccattttt aatggacatg 58251792

aatttatgtc aacatttgtt tataacatga ttatcataag ccagacactg 58251842

agccatattg tgtttcgtta gcatcatttt tatacttaca tattaatata 58251892

tttttagtca aatgatgtac tagattctgg agggagggtc acatgatatt 58251942

tatatggatt taatgtattt attacacttt agtgtgtttt ctcttcctgg 58251992

ttttcaaatg ttttaaggta tttggcatgc cttaaatgtt acttattttg 58252042

ttttttgtt aaacttaagt ttatgaagtt tcttttattt tcagttaaaa 58252092

aactgatttt cttctccttg tttcagTACA GCTATTGGAA TCAGATGCAA 58252142

AGATGGTGTT GTCTTTGGGG TAGAAAAATT AGTCCTTTCT AAACTTTATG 58252192

AAGAAGGTTC CAACAAAAGA CTTTTTAATG TTGATCGGCA TGTTGGAATG 58252242

gtaaggtcat gtttaaaatg ttccttttg tcttgtccaa tttcttttga 58252292

agtaactgat tggaatagat cactgtgcag tcacaaaagt aatcagagca 58252342

agttactgca tttgtccagt tcactgtcca gtagaaaggc agcattctca 58252392

taaccttatt agtgatgggg gaaaaaccaa gttgctgaaa gaagagcagg 58252442

tgagggagag ggctggggag tatgcgtaga aatgagatct tggcagcaca 58252492

cattactaat gaaggtatat gcttgagagg tgaagaatct ttagctttct 58252542

gtatctcttg tggggatcac tgtcaaagta aagatgccat cagatagcga 58252592

acacctttat ataaggtgga acatcaggaa aggatgttta atgaaaagga 58252642

aaagtgaaca catccataat agtttcatag ggcatcactg aaattaagtt 58252692

attcatgcag ctggtatcta agttatgagt gactaaattg caagccaagc 58252742

catagataca tgactggtat atactaaagt taccctacat agatggcaga 58252792

cttggcttag tgagaaccac tactgaaaga aaaaaaaaaa aaagaatcaa 58252842

atgattctaa ccctgccacc tgaaaaggaa aggaagaaag gagaatatct 58252892

ctatattagg ttttatgctg ggagctcttt acataaatta ccttgtttaa 58252942

tcttgacaac ccagtgaagg ttatatcaat gtcattttct ttttttttt 58252992

tttttggttt gagacagagt ctggctctgt cacccaggcc ggagtgcagt 58253042

ggcgccatct cagcttattg cagcctctgc ctcctgggtt caagcgattc 58253092

tcctacctca gcctcccaag tagctgggac tacaggtgcc cactaccatg 58253142

cccagctaat ttttatattt ttagtaaagg cagggtttca ccatgttggc 58253192

caggctggtc tcgaactcct gacctcaagt gatccatctg cccgcctcag 58253242

cctcccaaag tgctgggatt ataggcgtga gccactgcgc ccggcctaat 58253292

gccattttca caggtgaaaa aacagatgca cagcaagtaa agaaaagctg 58253342

ggattcaaac ttgggtctgc atgttactca agagcccttt ctaaatgaaa 58253392

agacacctta tatgacccac atcgttcagc tgatagcttt cttatatcta 58253442

aatgagattt aatgttacac acaaacacaa aaagtactgg taaagtataa 58253492

ccagtaaacc ataaagctaa ttttttctt cttcaaagat tattttatct 58253542

caacaatatg tttctcctga acagattttt ttattttgct gcaaatgaca 58253592

ggattttatt ttatttttg agatggagtc tcactctgtc atccaggaag 58253642

gagtgcaatg gcgcgatctc agctcactgc aacctctgcc tcccgggttc 58253692

aagcaattct cctgcctcag actctcaagt agctgggatt acagacatac 58253742

gccgccacac ccagctaatt tttgtatttt tagtagagac ggggtttcac 58253792

catgttggtc aggctggtct cggactcctg aactccagtg atctacccgc 58253842

cttggcctcc caaagtgctg ggattatagg cgtgagccag cgtgcccagc 58253892

ctagcatttt attcttttta aaggatgaat agtattccat tgtgtatata 58253942

tacattttct ttttactgtt tttttgttgt tgttgttgta cagatttttc 58253992

tcgtcaccca ggtactaagc ctaggaccca atagttattt tttctgatcc 58254042

tcttcctcct cccaccctcc accctcaagt aggccccatt gtctgttgtt 58254092

cctgtctttg tatccatgaa ttctcatcat ttagcttcca cttataagag 58254142

agaacatgtg gtttttggtt ttctcttctt gtattagttt gctaagaata 58254192

atgctgaaca gatttattat tgccagtgaa actgatatgt tttgatgaaa 58254242

cttgctacat tgtaacctag ctagtaggag gtgatcttgt attcttttat 58254292

gtactagcaa aagttaatat tttgaaaaaa attatgcatg catatatata 58254342

tgtatgtaca cacacacaga ggtcttgctc tgttgcccag gcttgagtgc 58254392

agtggcatga tcatagctca ctgcagcctt gcgctcctgg gctcaagtga 58254442

ttcttctgcc tcagcctccc aaatagctgt gactacaagt gtgccatcac 58254492

acctggctaa ttttttagtt tttttaagag atatgatctt gctgtgttgc 58254542

tcaggctggt cttgaactcc tgggctcaag cgatcctccc gcctcagctt 58254592

cttgagttgc tgagattaca ggcatgagcc aatgtgccct gtcaacatta 58254642

gacattgaag agggctggag aaaattaaga cttaatatcc tccctccttc 58254692

cacagttgtc atcttcaagt gatttgagaa ttatatgact ttacagtaag 58254742

ctttctctaa agcaacagaa gattctttaa gtgatgtaac ttactggcat 58254792

gggttacctt ggggaagcta ttctaaacac gcgtttcctt gtctgcaaaa 58254842

caagagtgat aatagtactt ggcacataca gttgttgtga ggttaaaaat 58254892

tattatgcaa aatgcttaac atgtaatgag tgctcagtat ctcttagtaa 58254942

ttatcattat tactattact gggtagcgta ggaaaaaaag gctattaaag 58254992

attgtgatac cacttttaaa ttctgtaact gtcctgggct agagggtttc 58255042

aaaaacttgg ttggtttatg gtaccttaag tgtctcagta gtttttctca 58255092

tggcttccct aggccgaaaa tacctaatgg tttcatttat taagtattta 58255142

gatccaaaga acttagtgtt tacatcctaa aaacttagta gccgtttttt 58255192

ttttttaaat acacacatag tgaaaaatat ttttatttaa aaattaaaat 58255242

gttttatttt aagcaaccaa aatttctagt atatacactg cacaacctcc 58255292

caaatttgga tgtggccact gtcatttcct gttccacact gatttttgca 58255342

cagtacttac tttttttcac agcaaccact aacagccaag cttctcaaag 58255392

atgtggtggc attgaaagga atgtagtaaa acgatctaat gttcaaacgg 58255442

aactacttgg acatttttct ccaaacttag aatgtgccac actaggccag 58255492

gtgcagtggc tcacacctgt aatcccagca ctttcggagg ccaaggcggg 58255542

cggatcacct gaggtcgaaa gttcaagacc agcctgacca acatggagaa 58255592

accctgtctc tactaaaaac acaaaaatta gccgggcgtg gtggcgcatg 58255642

cctgtactcc cagctactcg ggaggctgag gcaggagaat cccttgaacc 58255692

tgggaggtgg aggttgcggt gagccgcgat tgcaccactg tgctctagcc 58255742

tgggcaacaa gagcaaaact ccatctcaaa aaaaaagata tgccacacta 58255792

acatgtgatt tcactgcagt gcctgaggac ctctcggcac atacatagta 58255842

actgcaattc tgtttttgtt tttgtttttg ttttgagaca aagtctcatt 58255892

ctgttgctca ggctggagtg tagtggcgtg atctcggctc actgcagcct 58255942

ccgcctcccg agttcaagtg attcttgtgg ctcagccttg ggagtaggta 58255992

ggattatagg tgcccgccac caaacctgac taatttttgt atttttagta 58256042

ggggtttcac catgttgtcc aggctggttt caaactcctg acctcaggtg 58256092

atccccctgc ctcggcctcc caaagtgctg ggatcacagg catgagccac 58256142

cgtgcccggc ctagtaactg cagttctaag ccgcaaatct tgaaagagga 58256192

atggtttatc attgtagttt attcagccaa taggctgaaa aaagatttgc 58256242

gattgtgcct tttagaacaa aacagttaca ggttgagtat ctctcgtcta 58256292

aaatgcttgg gaccagcagt atatcggata tttttcgatt ttggaatatc 58256342

tgcattatat actcatcagc tgagcatcct taatctgaaa attcaaaatc 58256392

caaaaagctc tactgagcat ttccttttt ttttttttt gagatggagt 58256442

ctcgctctgt tgcccaggat ggagtgcagt ggcgcgatct cggctcactg 58256492

caacttccgc ctcccaggtt caagcaattc tctgcctcgg cctcccaagt 58256542

aactgggatt acaggtgcct gcaaccacgc ctggctaatt tttgtatttt 58256592

tagtagagac ggcatttcac catcttggcc aggctggtct tgaactcgtg 58256642

accttgtgat ccacctgcct cagcctccca aagtgctggg attacaggtg 58256692

tgagccacca ggtccggcct gagcatttcc tttgagtgtc atgttggcac 58256742

tcaaaaagtt tcagattctg aagcgtttta aatttcagat ttttggatta 58256792

gatatcctca acctgtaata actttagaga aaagaacaaa tttgggccgg 58256842

gcacggcggc tcacacccat aatcccaaca ttttgggagg ctgaggcagg 58256892

ctgatcacct gaggtcagga gttcaagacc agcctggcca acatgacaaa 58256942

accaaaccct gtctctacta aaaatataaa aattagccaa tcccagctac 58256992

tggggaggct gaggcaggag aatcccttga acctgagagg caaaggttga 58257042

agtgagccca gatggtgcca ttgtgctcca gcctaggtga cacagtgaga 58257092

ctctgtctca aaaaaaaaaa aaaaaaaaaa tctgaccaag acccatggtt 58257142

tttattcgtt ataatgaggt agtggtagta aatcagggga agaggattta 58257192

tgatagaagt agtcctgaat attggccggg cacggtggct cacgcctgta 58257242

atcccagcac tttaggaggc tgaggcaggc agatcacgag gtcaggagat 58257292

caagaccgtc ctggctgaca tggtgaaacc ccatctctac taaaaataca 58257342

aaaaaattag ccgggcgtgg tggcaggcgc ctgtagtccc agctactcag 58257392

gaggctgagg caggagaatg gcatgaaccc aggaggcaga gtgtgaagtg 58257442

agcggagatc atgccactgt actccagccc tggtgacaga gcgagacccc 58257492

gtatcaaaaa aaaaaaagga aatgtcctga atatgaacat tggacaaagc 58257542

aatgaagtta tacttactaa atttctaaat tataatttca tactcaagca 58257592

tcaaaatgcc ttgtagagag acctttaagc caaaaaagtt tattttgaat 58257642

ggtaatactt gttaaaaaaa tgtttaataa gtctttatta attgcagact 58257692

ttgatttgtg ataggaatgt gttcctctag taaattggtg ctttttttc 58257742

agGCAGTAGC AGGTTTGTTG GCAGATGCTC GTTCTTTAGC AGACATAGCA 58257792

AGAGAAGAAG CTTCCAACTT CAGATCTAAC TTTGGCTACA ACATTCCACT 58257842

AAAAgtaagt tgataacata ttgaggaacc ttttggacag taatagaagt 58257892

ttattaataa gctcttctgc ttccctccat agCATCTTGC AGACAGAGTG 58257942

GCCATGTATG TGCATGCATA TACACTCTAC AGTGCTGTTA GACCTTTTGG 58257992

CTGCAGgtaa gaaattttgt gaattattca aaaggcagat ctgtactata 58258042 p.H111Ffs*10

gatatttatt atgttcccca gcatcttagc cttttacata cttaaaaata 58258092

gaaactcgtc gataagtatt agggcaatga ttaaataaaa cagtgtacat 58258142

agaaactact tgaggctggg tgccatggct caagcctgta atcccagtac 58258192

tttgggaggt tgaggtggga ggatccctcg cgcccaggag tatgagacca 58258242

gcctggccaa cgcagtgaga acctatctct acaaaaaaaa tttaaaattt 58258292

agccaggtgc agtatcacat gcctgtagtc acagctactt aggagctgct 58258342

tgagaggatc atttgagccc aggagttgaa ggctggaatg agctgtggcc 58258392

ataccactgt actctagctg gcgcaataga gactctgcct ctttaaaaaa 58258442

aaaaaaaaaa aaaaaaaaaa ggtttcaata gtgaaaagga ctatatagat 58258492

ctgaagtgat tataaaacaa ggaactgata acaatgactt taatctgatt 58258542

ataataagct ctcggtgtta gtccctgata ttcttaggta attttaaaaa 58258592

ttacgtctca caattcccat taggcacggt ttctctttct gttgaagtgc 58258642

tgatatttta ttgtggggta aagtggagat tcagctgcat aaagacctgg 58258692

aataggtata aatattcaaa tttggcttca cagagaagac ttgtgactag 58258742

atttttctaa aatgaaaaga catgtttggc ttatgactta aaacagtcaa 58258792

acatgtttgg tcaaaataat acatatacta acatctgagt gctcagctgt 58258842

agtcctacct ttgagttgtt tatcatcagt catatttaat tactaagata 58258892

ttaaagaaaa cttgagtttt attctattgg taatattaca ttagggtttt 58258942

gtttttactt tttgagacag ttactgtcac ctgagctgga gtgcagtggt 58258992

gccatcatgg ctgactgcag ctttgacctg gctcaagcga tgctcctacc 58259042

tcagcctccc aagtagctgg gaccacaggc atgggccacc atgcctggct 58259092

aattaacaaa atttttttt gtagagacgg ggtctcacca tgctgcccag 58259142

gctgacatta gtcattctta agcttctcag ttaaattaca ttatgaaaca 58259192

ctttgttttc agaccatgta aaataccttt caactgagct ctgagttcat 58259242

cagttaactt ctctactctt tttaagggag taagaatagt agagataact 58259292

ttttttcata actttttttt tgtttgtttt gttttgtttt gagatggagt 58259342

ctcgctctgt cgcccaggct ggaatgcagt ggcacgatct caggtcactg 58259392

caacctctgc ctcccgggtt caagctattc tcctgcctca acctcctgag 58259442

tagcagggat tacaagcacc tgccaccacg cccggctaat ttttttattt 58259492

ttagtacagt cagggtttcg ccatgttggc caggctggtc tcaaactcct 58259542

gacctcaagt gatccacctc agcctcccaa agtgctggga ttacaggcgt 58259592

gagccaccgc actgggccag agagaacttt tttagtaaac atctattggg 58259642

cactgagtta gtcataaatg tggagacaca ggtgtgaagt cacattgata 58259692

aaatattagt gatatgataa agggacaaca attagggaac ggactctttc 58259742

tggacaggag gcaaggaaga gtgtgagatg tagggagact tggtagttgc 58259792

aagcacagga actggtatga aaatacgtgc gccagagaga gttaagtatg 58259842

cttggtgtgt agagtatgag gtttagagat gatactgatg taggaagggg 58259892

tccagtcata taaaagtctg tgctccatgc tgattttctt caaagaaatg 58259942

ttgaaaggct ttaaaatagt gacaatgagc tatatatcct gaaggataag 58259992

tctcatatcg gtagaaaatg gaaggaaatg acggtaggga tgggaattga 58260042

atagttaaaa tattccgcat ataagatgat gtgtaagatg ctgctgattt 58260092

cttttctact ctaaggcaaa tatagttgtc ccttggtatt tgtgggggat 58260142

tggttttagg acctcccatg aataccaaaa tccaaggttg ctgaagtccc 58260192

tgatataaaa tggttaagta tttgcatata acctgtgcat atcctcctgt 58260242

atgttgtcat ctctagatta cttgcaatac ctaacacagt gtaaatagct 58260292

gttacactgt attgtttagg gaataatgac aagaaaatca cagttgttca 58260342

gtacagaagc aatgtttttt gaaagttttc tatctgtggt ttgttgaatc 58260392

cacagatgca gaactcatgg aaacagtgcc cactgtatgt cacaatttca 58260442

gaaaatcagt atttcataca atcagctaat agcctaattt gttgagcaca 58260492

gaaaaataca ctgaaccaat tctgattatt gcagagaaat gattggcagg 58260542

atattgggaa atagaatgaa gggtggaaag aatttcacat ggattcagta 58260592

tactctccgt caggaatttt gttcccttga tctttttgtg tttatgcctt 58260642

atttattggg ccctctcata gttgtggttt tcatctatcg ttactccttt 58260692

ccctgtactg ctagactttc caggagacct tcatcagaaa gattaatact 58260742

aaacaaacaa aagctacatg aattttgaat aatctcatgt aatagtttta 58260792

attaattgaa accactgttt caaagtactt actgagttat atgtgtatta 58260842

gtaatttatc tcagaaagaa aatataactg cattttaaaa taatttttc 58260892

acaaatactt ttatgttatt gccatggttt aagctgtttg tatactttca 58260942

tgcagTTTCA TGTTAGGGTC TTACAGTGTG AATGACGGTG CGCAACTCTA 58260992 N144S A147T

CATGATTGAC CCATCAGGTG TTTCATACgt gagtaatttt gaatcatttg 58261042

aaattctatt ttagtttaat ggtatttcat tagcatttaa gtctcattat 58261092

aagattatat gaaattaaaa aaaaactcat tcaaggaaag taatttttct 58261142

ttttttttt tttacaacaa cctcttgtcc aacagaattt ttttttttt 58261192

ccttttgggg ggaacagggt ctcactgtgg cccaggctgg agcacagtgg 58261242

tgtgatcaca gctcactgca acctctgcct cccaggttca aacagttctt 58261292

ctgcctcagc ctcccgggta gctgggatta caggtgtgca ccacctggct 58261342

aatttttttt atttttagta gaaacaggcc tttgccatgt tggccagact 58261392

ggtcttgaat tccagtcctc aagagatcta cccacctggg tctcccaaag 58261442

tgcgagtatt acaggtgtga gccaccaggc ccagccatgt tttcttatca 58261492

ttaataactg atacgaggca gaggaaagat ttttttcag tatgttattt 58261542

atagaaactg tatagtgcat atagtatttt gaatatgtga ttttccttta 58261592

ttactataaa cactgtctta aaactgtatt taatgtcttt tttcctcatt 58261642

cttgcccagg ctggagtgca gtgacacaat catagctcac ttcagcctct 58261692

caactcctgg gctcaggcga tcctcctacc taagcctccc aagtagctgg 58261742

gactacaggc tcatgccacc atgcctagct aatttttgta ttttttggt 58261792

gtctatagag acaaggtctt tccacgttcc cagggctggt ctcaaactcc 58261842

tggccttaag cagtcctcct gccttggact cccaaaatgc tgggactaca 58261892

ggcgtgagca tcgatgtcca gccatgtcat ccctttttatt ttatttattt 58261942

ataagatgga gtgtcactct gtctcccagg ctggagtgca gtggctcgat 58261992

cttggttcac tgcaacctct tccgcctcct aggttcaagc aattctcctg 58262042

tctcagcctc ctgattagct gggattacag gcatgtacta ccatgcctgg 58262092

ttaatttttg tatttttagt acagatgggg ttttgccatg ttggccagct 58262142

ggtctccaac tcctgacctc aggtggtctg cccaccccgg cctgccaaag 58262192

tgcaaggatt acaggcgtga gccacagtgc cggacctaat tttgtttcag 58262242

acagcgtctc gctctgtcac ccagactgga gtgcagtggc gccaaacctc 58262292

cacctcccca gttcaagcaa ttctgcctca gcctcccgag taggctggga 58262342

ttagaagcat gcatcaccac acccggctaa tttttgtatt ttcagtagag 58262392

acgaggtttc accatgttag ccaggctggt ctcgaactcc tgatctcaag 58262442

taatccgccc accttggtct cccaaaatgc tgggattata ggtgtgagcc 58262492

accttgccct gccttccctt ttaaagagaa ggtttaaatg tgatttctaa 58262542

gagctttccc taaattatta ccatttttt ttttttttga gacagagtct 58262592

tgctcagttg cccaggctgg actgcagtgg tgcaatcttg gctcactgta 58262642

acctctgcct cccggattca agggattctt gtgcctcagc ctctcaagta 58262692

gctgggatta caggcctgta ccatcacacc tggctaattt ttgtattttt 58262742

agtagagaca gactttcacc atgttgccca ggctggtctg gaactcctgg 58262792

cctcaagtga tccacgtgcc tcagattccc aaagtgctgg gattacaagc 58262842

actttgtgtg agccactgca cccggcctgt taccgtttct taactgtttt 58262892

cttatcctta catttttgtc gtttttacta attgaagaaa atgaagattc 58262942

ttaaatatat tttgctgtaa cagaagtata tatgtgtaca tccttttttt 58262992

ttttttttt gatggagtct cactctgttg cccaggctgg agtgcagtgg 58263042

cgcggtctca gctcactgca acctctgcct cccagattca agcgattctc 58263092

ctgcctcagc ctctggagta gctggcatta caggcacctg ccaccacacc 58263142

tagctaattt ttttgtattt ttagtagaga cagggtttta caatgttggc 58263192

caggccggtc tccaactcct gacctgaggt gatctgccca ccttggcctt 58263242

ccatagtgct gggattacag gcatgaccca ccacacccag ctgtgcatcc 58263292

ttatctttaa aaaaatttac aaaataataa aattgggggt ttagagtact 58263342

gaactcatag gaattaactt tatttctgtc tctcaggaat atataatttc 58263392

atttttcatt gtcatagtgc taaaatcttt tccgttcctg ttccccaaaa 58263442

tgtcttaaag tgtatatgat tacataattt acatattttt ggatatacct 58263492

ttattaaaaa tacaggttgt tttggaattg tttggtattt tagtattttt 58263542

gagccctttg gcattcatca gaatgtgttt gactatattt ttctatactt 58263592

gcttttaaaa gtcatttagc atcctttcac taggttatag aaacattagt 58263642

agtcattaat tacatatgat agtgtactaa ttcagtgatt atatatattt 58263692

ttttctaaat agGGTTATTG GGGCTGTGCC ATCGGCAAAG CCAGGCAAGC 58263742

TGCAAAGACG GAAATAGAGA AGCTTCAGgt aataattaat gcttgaattt 58263792

ttactatgtc gtcatcctaa tgcagtgaaa ttttatcacc acagacattt 58263842

cagtctaagg cagggatgtc caatcatttg gcttccctgg gccacacata 58263892

aaatacacca acactaatga tagctgatga gcttaaaaaa aaatctcatc 58263942

atgtgttaag aaagtttacg aatttgtgtt tggccccatg tggcctgtgg 58263992

ctggggaagc tcggtgtaag gatatagtgt ggtttgatgt tgagagttta 58264042

tgaagctgct aagtcactga atgggaaagc tggtaacata ttatctgtag 58264092

agttgtgtta tacatccctt tatagattct gaataactgc tataaagcct 58264142

caatctagaa aaacacaact tttgatatga tttcacaaaa tccttgaaac 58264192

ctatttatga atctctgtga gctctagttt gaaaattttg tttaaaattt 58264242

tgagttaata aaaagttata tttttcctat attctttctt tggaacacag 58264292

cttttatgtc tggctgtgct ccaccggttc tcttagcttt gctcctagcc 58264342

aggtaaggca taaagcctac actcttacga ctacccactt tttctttcac 58264392

aaaattcagc tattagtgtg aaaaagtttt cttaaaaact tggttttcct 58264442

tttagccatg cgttgatcaa cttaaagact tcatggatac tgtttcaata 58264492

ttattgatta cctgtcagaa acttgcctaa aaagcaggca taccatttat 58264542

cagtgttttg gtaaactgaa gtgagataca atttcacata catttaatgt 58264592

taatgctgta ctagaaccct gctcaactaa ttactcattc aacttattta 58264642

agaccagctt ctagaaaata cttattagtg cttggcattt atacaatgct 58264692

aagttctaga acccccctata aaacctaatt tgtttcgtat tttagtaaag 58264742

ctgacaaaag gatcttagag gtcatttagc ccaagctcaa ctgcagatta 58264792

aacacactgc ataggaccac agaatcagct ggttctgaac agtatccaga 58264842

ccttatgagt cttagaccta tgttcttttc cattgcacac ttactagtat 58264892

gatgctaggt tcctatcttc tactcttttc cttttgtttt catctctcca 58264942

tactattata tggaaatttg aaaattagaa tatttatgtc agttgagggg 58264992

gattacccct gtaatcctac cagtttggta ggccaagttg ggaggactgc 58265042

ttgagcccag tagttccaag accaggctgg gcaaaagagt aagaccctat 58265092

ctcccaaaac aaaatgttag cgaggtgagg tggtgcgtgc ctgtagtccc 58265142

agctacttgg gaggctgagg caggaggact gtttgagccc cagccaggag 58265192

ttgggggcta cagtgagcta tgatcacgcc actgcactcc agccagggca 58265242

acagagcgac accttatctc aaaaaaataa aggaaattag aatatttaga 58265292

gcagttacta tctgtctttc tgtagttaaa tcctagcaag gaatgggaaa 58265342

aacaataaat cccagagaaa aatcaagaaa aaaaaatcac tttaattgag 58265392

gaacactttc agtttgtgac aaaattatgc tgtgaatcag gtgttgcaaa 58265442

ttatggccca ctgcctgctt ttgtgtaagt tttattggaa cacagctaca 58265492

ttcagtccat ggctgctttt agaatacaac agtagacttt aacatttgga 58265542

acagggaaca gaaaccagag ccatacagct aataaacttg aaaatattta 58265592

caagttgatg ctttacaaaa tccatctgct gacccctgct ctgtaccatt 58265642

gttctcttct gatggtctgt ttactaaaaa ataaaaactt cacaaacatg 58265692

taaaaaatag atttgccatt taaaatgtgc ttttcaagtt tgacttttta 58265742

ggatgcaatt aattcactaa atacagaact taactaagga caaaaattta 58265792

aagatcagca ttctttccct tcccatcacg ctcaacttaa catgaagaac 58265842

tgtaaacatc ctaagcttac aacaaaccta tctagttaga cttcagttaa 58265892

ccacttacac atccccctcc cccatgaact atttggaaaa agctgcaggc 58265942

gtaatattgg atccctaaat actttattct ccttatacca ttatcagacc 58265992
caagtatcat ctaatagtcc ataatcaaac tgcctaagca gtttctacac 58266042
tgtcttttta actatttcaa actatcaagg ttcgcatttt cttccttaga 58266092
acttttagtc tttttcttcc ccaaaatatt tgagtccatg ccagttgcct 58266142
ttagttgtac ccaaataatg gtttgtctat ttcctaaaag tagtactctt 58266192
aaatttaaat ttagtgttat ttttgttgtc attgttcctt cttcctcatg 58266242
tggttgtgca ggcagagctt gagcatccag atttcaaaat taaaaaataa 58266292
aagataatct agtttaatat atagtagttg aatcacctta agtctagact 58266342
gctgtatgag cacccattat ctttcactat attccatcat cccccaacat 58266392
atccacagta gatgaagggc agtttgctca aacattgttt tgatcctgtc 58266442
atgtctgttc agaaatgcct gtctattcag aaacccacgt ctaataacaa 58266492
aatcttggac tggttactat caaaacccaa caacatacag actcctcagc 58266542
taggccctag ggatattttt ctaccttgat ttccaaatgt tcattgaaag 58266592
aatgcttaat tctaatttgg aaaaaagttt ttggcttccc acttctgctt 58266642
tacacgttca tctttcttga aatcaaatcc aatccaatct atattctaag 58266692
aacctgctca aatcttggtt cttcaaagct ttccctggta ttttgcattt 58266742
ttgctttgaa tagttccacg aaggataact tcttactcct tccttcatct 58266792
ttctgtatct tgcatatagt aaatattaat gacttgtttg cattttgtta 58266842
tcctaacttg gctataaaga aaatcagatg tcttcaccag tcgttcaaac 58266892
ttcaggtctg cctacagatt catagatggc tgtggatttt tataattttg 58266942
tcacaaagtt agtggtaact acaggttatc tcagaatatc ttttttggcg 58266992
tataaatttt tttcttttcc ttttttagac agtctctctc tctgtcgccc 58267042
aggctagagt gcagtggcgt gatcccggct cactacaacc tctgcctcct 58267092
gggttcaaga gattcttagg cctcagcctc ccgagtagct agggttacag 58267142
gcgcgcacca cctccatgcc cagctctttt gtatttttaa gtagagacag 58267192
ggtttcacca tgttggtcag gctggtctcg aacttctgac ttcaggcaat 58267242
ccggccgcct cggcctccca aagtgctggg attacaggca caagccactg 58267292
cacccagcct ggagtataaa tttcaaaaca ttaaaatatg aatcaggaaa 58267342

cttcgattct ggtctttttc agactttagg ttattttcct tggttttata 58267392

tctgagtata aaagtgaaaa tagttattac acaagtggaa aatgttcttc 58267442

tgatgaacag tatacatttt attttctata gATGAAAGAA ATGACCTGCC 58267492

GTGATATCGT TAAAGAAGTT GCAAAAATgt aagttgaaat ttttcttacc 58267542

atccacaaaa atatttcatt tgacctttgc atatatatat tacattaatc 58267592

ctaagaagct gttttcctgt aaaataactt agtgtataat ttttagaagg 58267642

taaatttaac attctaagaa gcctcacgaa ggaagaaaat gtttttaagc 58267692

aatatttttt agtagtaatg aataggatgg gaaaaatagc ttgacaaaat 58267742

aaactcctgt tacaggttaa ggacatatac cattagggtc ttaatttgtt 58267792

agctcccaac ttctcaaatc tcttaagtcc taataatagt aatcttaaga 58267842

ttgcctctat tgtaagaatg cttacaaact ttataggtta caactaatta 58267892

tttcaataca tgatccatga agctggctca tttatataat ctgctattta 58267942

tttgggaaag atatgtttca ctttttcagg tttattataa aagttcctat 58267992

aacaaggtaa gaagagcagt attacaaaac atttcaacaa ccagcttaag 58268042

aaaccctgaa tagtttatta caggtatata aagtagaata ctattaatat 58268092

gtaacaggta tttggacagt aaacaataaa aaagtcaatt aacctgggta 58268142

gtgatgtttc taaaattttg tgattctcta gatcaaagag tgtagacatt 58268192

tggtattaca aaaagattcc aacaaaatac gttgtgtagc cagctttta 58268242

gattcaaaag ttatggataa tcgtaattca taacaactct aagtattcca 58268292

cattagaact acataaacaa ggtctagtca atcacctgtc tgtatggtag 58268342

tgtatcaggt tttacatcta acaatacgtg gaagaaaaaa attccaatgg 58268392

gctctattgt ttaataaaca tactatttac atcacactca gagtctctta 58268442

ttaaccggtc catcattact gctactgcct ttacccctct tgccacctcc 58268492

tcccctccgc cctcctagtt tcagttgtga agcaagcaga agccattcta 58268542

tgattgtcag ttaataatgg caacactagg aaccaacatg cagcagagct 58268592

gctaagaaag gaagtcagat atcttccttg aattgtatag tatgttatca 58268642

tgatatactc tgtttccttc accgaaccaa tcctttgaag tccttctgga 58268692

aatcagttct taccatcttt tatatttagg tataatggta gtcatctgtt 58268742

aagtgttcca tgttaggaaa gccatccctt catcatttaa gaaaatggag 58268792

cagcatgtta tcttttactt agttgtagaa aatcaagatc ctctcatatt 58268842

atagcaaggt tttagaagac cctccaaaaa gtaaggtatg taactcagtg 58268892

catagtatta gataaagcta tactctgcta ctgtacttaa tttgatactt 58268942

ttttttttt gagatggagt ctcactctgt cgtccagact ggagggcagt 58268992

ggcacgatct tggctcactg caacctccgc ctcccgtgtt caagcaattc 58269042

tcctgcatca gcctctcaag tagctgggat tacaggcgcc caccaccaca 58269092

cctggctaat ttttgtattt ttagtagaga caggctttac catcttggcc 58269142

aggctggtct tgaactcctg accttgtgat ccacccacct tggcctccca 58269192

aagtgctggg attacagatg tgaaccaccg cacctggcct cttgatactt 58269242

tttatgttac tttaatatgt tgcatgacag tgcctccttc tttgctgtaa 58269292

tttgtaaggt actacaatgt gaaggccagg ttatgtggca tatatgccat 58269342

tataaaatgg acaaggagct taaaaagact actgccaaga agctataggt 58269392

tgaagagacc actaataatt gcaagcacat aaattagttt ttttttttt 58269442

atttttttga aacagagtct cactctgttg cccaggctgg agtgcagtgt 58269492

cgtgatctca gctcactgca gcccctacct cctgggttca agcaagtctc 58269542

ctgcctcagt ttcccgagta gttgggacta caggcctatg gccacctcac 58269592

ctggctaatt tttgtatttt tagtagagac gtgggttcac catgttggcc 58269642

aggatggtct cgaactcctg acctcatgat ccacccgcct ctgcctcccc 58269692

aaagtgctag gattacaggc acgagccacc atgtccagcc aattagttgg 58269742

ttttaaatat atttaagtta atggacaaaa tattctaaaa gggcacagtt 58269792

aatgacgcct cttcctagtg aatccgtgtt ctttatgagg tatcttttat 58269842

agttgtatct ttttttttt ctgagatgga gtctcgctct actgtagccc 58269892

aggatggagt gcagtagtgt gatcttggct cactgcaacc cctgcctccc 58269942

gggttcaagg aattctcctg ccttagcctc ctgagtagct gagattacag 58269992

gcgcccacca ccacacctgg ctgatttttg tttcttagta gagacagggt 58270042

ttcaccatgt tggccaggct agtctcgaac tgacctcaag tgatccatcc 58270092

gccttggtct cccaaagtgt tgggattaca ggtgtgagcc actgtgccca 58270142

gccaagttat atctctaaag caatgtgcaa aaataaactg aacttgggtt 58270192

gattaggtat attcaacatt tgtcgggaga gtagatgttt cattttattt 58270242

cagtccctgt gtaatttgtc ttctctaatg ttaaatacta tgtagaatgt 58270292

gtctgtgtaa ttttatagat acttttatta tggatggaca ttctaatttg 58270342

tactgacttt gggtctgtga actacttcaa tgtttggagg ttaccaaaat 58270392

cttacctttc ccttttctat tctagAATTT ACATAGTACA TGACGAAGTT 58270442 Y199C

AAGGATAAAG CTTTTGAACT AGAACTCAGC TGGGTTGGTG AATgtaagtt 58270492

atttttgtac atttatttgc cttaggaatg atctgtacca cagctaattt 58270542

acaactgagt gtcctttcta atataatgaa agctaaagca aatttactag 58270592

gttgtctaat gaagggaaag ttctgcttaa taattgactt aagttgtgaa 58270642

cacgttattt tttgaaacat ccatttcatg gttttaagat actatgctat 58270692

aaattaatgc tcaggattta taaatagcat aatttacttt catttccata 58270742

agaacttaat atgtaggcac atataatctc atgtagaagc agcacacaaa 58270792

aatattcgag tattactcat agtacaactt tgcaacctta ggtgagtcag 58270842

atatgtggat tgggtagatc ctatggtata ctgcaagtta caatatggta 58270892

ctcaatttaa aattcattta cacatgtggc ttaatttaca gTAACTAATG 58270942

GAAGACATGA AATTGTTCCA AAAGATATAA GAGAAGAAGC AGAGAAATAT 58270992 p.R233del

GCTAAGgtaa gccacagcac aaaaacttct cttggccagg tacagtcagg 58271042

gaatcactta gcccaggagt ttgagaccag cctgagcagc acagcaagac 58271092

ccccatccct aatttaaaaa aaaaaaaatt ctctaaccaa aattatgtgt 58271142

tgaataatat aaatagactg gggtggtttc tatgaaataa cactgagagt 58271192

tcagttgaac taaagataga aattttctag gttatctcta gtgggtaaag 58271242

ttgccttggt tccaaaaaaa aaaaacttgg gaggtttaga ctgcaaagag 58271292

ttttttagga cttttaatac tttaaatatt tgttcttttt ttttttttt 58271342

tttttgagac ggagtcttgc tctgtcaccc aggctggagg gcagtggcac 58271392

catctctgct cactgcaacc tctgcctcca gggttcaagc gatcctcctg 58271442

cctccgcctc ccaagtagct gggattacag gaacatgcca ccatacctgg 58271492

ctacttttgt atttttggct tcaccaataa tacagagacg ggttttcacc 58271542

aggctagttt caaactcttg aactcacgtg atctgcctac tttggccccc 58271592

gtaaagtgct gggattacag gcatgaacac tgcaccaggc ctcttaagta 58271642

tatattctat caaagataca gtcattgcat gttagagcaa catttgctta 58271692

attaactttg cttgggtatc ttattctgaa actgttcatt cagttacaag 58271742

tagaggaatt taaccactta attcaggttg ttgtagctta acttgcccac 58271792

aggtgtggga tataacaatt ttaaaaatca attttaaaca cctgttttct 58271842

cttaacagGA ATCTCTGAAG GAAGAAGATG AATCAGATGA TGATAATATG 58271892

TAACATTTAC TCCAGCATCT ATTGTATTTT AAATTTCTAC TCCAGTCCAA 58271942

TGTAACTATT TAGCCCTGGA TTATACATAC TGTCCAATTT TCATTAAATT 58271992

TTTGTCTTAT AActattgaa gtttggttaa tatctgcttt acaaaattgg 58272042

tgggggtaaa tgaggacatt tactcagtat taaaatatag atttatgact 58272092

actgaaaaat tccctggtta aaatgctgca gaattaattc caagactgta 58272142

gattaattca aagccccatc ttcatcactc aactagaatt tacagatcat 58272192

attctcctgg gcttttgtac aaaaagcacc taccaactta gtggacaaat 58272242

aactgatacg gtttcccact ttcatatgaa gtaactggtg gtcatcagtc 58272292

actgttaatc tttagatgtg atacagatga cagatgtttc agttttggat 58272342

aatttttcaa aaactgaccc ttctcaaaaa agacccttca atacatgagt 58272392

caaggatgtt tttgcttttt tcctttattg tggtgagggg cggatttaag 58272442

gatcaataaa gtccctattc tgtcactaaa aaaatttctt gatctctaaa 58272492

gattaaaata aaaataccaa catcagacag ctttcatgtt aaaaatcaga 58272542

atttatgtta aagtgctctg taaacagaac tgttactaag tggaataaac 58272592

agtactgtgg ccgataagaa taacttgaag ctgaaaagca gtactcacag 58272642

caggaacaat ttgaactcag gccatgtata cacaccctct agtggactca 58272692

tgccagtgtc actccattga agtgttgtgc tttcctaaga aggtaatcta 58272742

gccactgaat ttgggtgcag ggtatcgctg gactttgagc atttgtgtag 58272792

tttaaatagc aaatcattat acctgagtat taatagctaa ctactacaca 58272842

aacaactcaa aaccagtaat gtcatgtcat taccatggct tcttttatgt 58272892

aacattatct gctacatttt accactcaaa atatatttaa aatatgtatt 58272942

ttaaaatata ttagagcata tggctcaagc aatcctccca cctcagcctc **58272992**

ccaagtagct gg

PSMA3 (NC_000014.9, GRCh38) - gDNA - 2026-11-04

