



NCSTN (NC_000001.10, GRCh37) - gDNA - 2026-03-05

ctaatactgc gatctcagta tttgcctcc accccaacg acccactc 160312222
gagctctaga gctgccgtac ttagcaaata aaaatacgag atttccagat 160312272
aaatttgaac ttctggtaag caacgacaga ctaaaaaact attcattggt 160312322
tacctgaaat tcaaatttaa ctgggtatcc tgcattttat ctggcaactc 160312372
tatcaagttg agactttatt ggggttataa gcctcaagta ctatttccgg 160312422
gtagtaaata aagccgaatg gaggcactga tgttgagatg ctgcagccaa 160312472
ggcctcctta agtgaggttg ccactactcg tctccaaaaa ggctactgac 160312522
tcgggtgcga gtaacagaga tcgagactca gttcccaggg cactccata 160312572
taacacagtc atcaaaaagc caacagatca cagggccttt ggagcagaac 160312622
aacacaaatc gggagcacag ccaagagaga aagggggaag aaagaatagg 160312672
gaggggtct aaggaatccc ctgcagtgtg ggagccactt tataggtaaa 160312722
tcgaagccca aggacacacc aaagaagagg ggactggaga accgctagcc 160312772
aggcccaacc tctctcccac cctcctctt cctccgggtc cgtctggtgg 160312822
gccatttcg accaacacct ctaccattt tctcttccc ggtgtcagcg 160312872
ccgctcctga catccaacct ccatgttccc cctttattc tccactacct 160312922
ttgaccgcg cgctcttggc ctcgaaattg gttaacatct ctcaggtctc 160312972
cgactccgat gtcttaatcc gagccccgac acaccctgct gcccttcgga 160313022
cgcctccacg tcagcgacc tctcccgcg tttccggaag cgcctggaaa 160313072
cacgaacttc cggctcttta ggctccgggc cacagagacg gtgtcagtgg 160313122
tagcctagag aggccgctaa cagacaggag ccgaacgggg gcttccgctc 160313172
AGCAGAGAGG CAAGATGGCT ACGGCAGGGG GTGGCTCTGG GGCTGACCCG 160313222
GGAAGTCGGG GTCTCCTTCG CCTTCTGTCT TTCTGCGTCC TACTAGCAGg 160313272

tgaggcctcc cgcgccgtga gctccgttct ctaaggggaa ctctcggatc 160313322
ggccccgccg cgaccgccac tgtctccctt ctggttcctg ctgcccctct 160313372
gtccccccac cctgtaaadc ctctttcttt ttcgttccca cgacagaagt 160313422
tccccctttg cctggacctg aaggctccctt ctcccccgca gcacgtcgtg 160313472
tcgcttctact cccttctcta ggcctcttcc tggacttcga gcctgaccct 160313522
ctcccacttt gtccagatgt ctcgtttttc ccacaacccc agccaccac 160313572
cccacagtgc aaaggaacag gtgtgaaagt tagctttctt cctcgcgttt 160313622
agactttttg agacgaaagc aatcttgttc tgtgggtgct gtgcggcgct 160313672
taaaaggtgg atttcttatt tcttcctctg ttgattacat cctaagtctg 160313722
tgtccccctg ccttgccctca ggtttttttt tttttttttt ttttaatcag 160313772
taaagcaaga ataaggtagg atatgggtac tcttaactgt gaagaccctg 160313822
aagtaacaat tcaaggaact tttggcattt ataatgtact taagtgtttg 160313872
ctgatacgcg ttcatttact gatacatggc tttttagtgt gtcaagccct 160313922
aaaatgcaaa tgccctgtata taactatgac tgtgccttcc cccaattcac 160313972
attgttttta aggatcctca aaggagaaac tacagctgcc ccacactgtg 160314022
ggcacacaaa tgacctgctg atgttaaatt aactgacccg tgtatgtcat 160314072
aaggtttctc tcaattctgt tcacactctt ggaaaaatgc ctgagaaagt 160314122
tttcttagcc cagcacctgt gtattaacca attagtaata tacatacagg 160314172
atatacaagc agaagtgtga tcacctgtgc aaccagaatc tggcaaatct 160314222
aaggtcaaac acctttcctt tgaccaagtt ttctctcttt tagtgtcact 160314272
gtcaatggcg ctacatggac tttgtaataa ccctttgagg cacatagctg 160314322
ggtgccatgt agaacatgta tctgttacga taagtgtgtg cccaagaaat 160314372
cagaagaatg gactttaatc tcattttaga aagtatgata ttaaagtatt 160314422
tacccaagcc atacttcagg ttaatgacac gatagaagct agtacctgtg 160314472
tctctcaaat ttttctaaca ctttttatct tccgatcagG **TTTGTGCAGG** 160314522 **G33R**
G**GAAACTCAG** **TGGAGAGGAA** **GATATATATC** **CCCTTAAATA** **AAACAGCTCC** 160314572
CTGTGTTCGC **CTGCTCAACG** **CCACTCATCA** **GATTGGCTGC** **CAGT**gtgagt 160314622
tgagatggat tcatgtttgt ggacattgat atttgtctgt gccctagata 160314672

ctaagtaaca tccatgtcct gcttaggaga tttgacactt atattggact 160314722
gtatgtaggc agttacagat aaccgtctgt caagctaggc aagataatta 160314772
ataagaacta acatttagta aatgctgcat accaagcttt ttacatgtgc 160314822
atctcataca accccaacca caaccccaca aataggtct tactgttatt 160314872
gtcactttat aaatgatgaa actaaaactt aaagaagttg agtaactttc 160314922
ccaagatcat actggtaata agtgatgatg ccaggatctg gtggcccag 160314972
cactaagctg agagaccttt tttttttgac acggagtctt actcttgtcc 160315022
cccaggctgg agtgcaatgg cacgatctcg gctcacggtg acctctgcct 160315072
tctaggttca agtgattctc ctgcctcagc ctcttgagta gctgggatta 160315122
catgcacctg ccacatgcc cagctaattt ttgtattttt agtagagatg 160315172
gtgtttcacc atgttggcca ggctggctc gaactcttga cctcaagtga 160315222
tccaccacc ttggcctccc aaaatgctgg gattacaggc gtgagccacc 160315272
gcaccagcc gagccagcac tcttaaccac cctattatac tgttttttaa 160315322
ggagaaaaaa gtctcatatt ctatggtgtc cagttatcac ttgactctg 160315372
aactttttgg aacccaaatg ggctaaaggc aatgaactat ctgaagagaa 160315422
ggcactgaaa atgccaaata ggctgggctg agtggcacat gcctgtaatc 160315472
ccagcacttc aggaggtcaa ggctgggtgga tcacttgagg tcaggagttt 160315522
gagaccaatc tgccagcatg gtgaaacccc cccatctcta ctaaaaatac 160315572
aaaaattagc cggctggctg ctatggcatg cctgtagtcc tagcttctcg 160315622
ggaggcggaa gcagaagaat cccttgagcc caggaggcgg aggttgcaat 160315672
gagctgagat tgtgccacca tactccagta taggtgacag agtgagacac 160315722
tgtctgaaaa aaaaaaaaaa aaaaaaaaaa aaaatgctga ataattgcaa 160315772
gaggaattag tgaagcattc tatttatcct tttttaaaac tttttttcct 160315822
taaattcaac tgacaggccg tttattttca cactttgtgt gttccaaaag 160315872
aaggttccat gacactgtgg ctttaaaaac tatcaaaatc atagggcagg 160315922
aaaagtagta atctaaaggc taacctgctg tcttcagatt ttgtttcca 160315972
tggaacaatag ctctgtcaga atgtagtttt gcagataagc aggaaacttg 160316022
gggtctgata ctggcttctt catcatcaaa ttgatcacct ctgaatttca 160316072

gtttaccctt ggaataatgg ttggagtact tgcataaagc tgaaagtcaa 160316122
atacctctta atagttgttt attgatgacg ctaggtaaata aggggtgtct 160316172
caaaagtgct gtataatttc ctgaagcctt cttcccattt gataagagaa 160316222
aactgggaca ctgagaagtg aaggacttgt tctgtggaagc agttactact 160316272
tttttagcca tctttccctg agctatagta tctgttaatt gtcccatgtc 160316322
cctgctatac aaagcactgg gagtaggttg actggttcca aacagcccca 160316372
aataaagttt ttgttgact tagtttcttt tttttttttt tgagatgcag 160316422
tctcgccctc tgcgccaggc tggagtgcaa tggcacaatc tcagctcact 160316472
gcaacttctt cctcccaggt taaagcaatt ctctgtctc agcttcttga 160316522
atagctggga ttacaggcgc gtgccaccgt gccagctaa ttttttgtat 160316572
ctttagtaga ggcggggcct caccatgttg gccaggctgg tctcgaacct 160316622
ctgacctcgt gatctgcccg ccttggcctc ccaaagtgtc gggattacag 160316672
gcatgagcca ccatgccag ccctctggac ttagtttctg aactggtttg 160316722
taggtagaag agagctaggt ccagggtggg ctgagatcag actgctggtc 160316772
ttgctggaac ctcaactataa agtacagaag gccaggacct caacctcttg 160316822
taactaggct ctaagaaaac tcctttggga ataagtcatt ctactctatg 160316872
ttcttaaac agctctgtag gaagcaaagc ctctagaggt aaagccacgt 160316922
gccagtacag agaaacaaga gggggtaagc gggactgtgg ccacttctc 160316972
attaagatct tggttccttt tcaacctact tatttccaaa tcttacttctg 160317022
tcatatctgt cttttctgag caggctccgc cttttttaat tagttagct 160317072
aacatgataa aactaaggag aaaaaagtga taccagatt tgatttctga 160317122
ttataaact ctgcttctct tagacgcttt aaagttctca aagggggcct 160317172
taaataaggt tcttttccct ccctccctcc ttctatcctt tcttcttct 160317222
ttcgtctgtc cccacagtat gagatgaata gaggtagaaa acctcattga 160317272
aggcgcagag aaaataagca agttacttaa gactacacca ttactagttg 160317322
gaaccagat tagaatccag gtttttttca gtccagtatc atagtttgtc 160317372
ttcctgtcct cgctggagtt gaagttttgg ggtgtgtgtg tgtgtgtgtc 160317422
agagtctcac tatgtcacc aggctggagt gctgtggcac aatctcagct 160317472

cactgcagcc tccgcctccc aggttcaagc aattctcctg cctcagcctt 160317522
ctgagtagct agcattacag gtgtgcacca tcacacttgg ctaatttttg 160317572
tatttttagt agagatgggg ttctgccatg ttggccaggc tggctctcaa 160317622
ctcctgacct caagtgatcc acccaccac ttcggcctcc caaagtactg 160317672
ggattacagg catgagccac tgtgcccggc cgaagttata tatgttttag 160317722
ttgccacact atctgttcct tttcccatgt tttaaatgct gtggcaaggg 160317772
ccgggcatgg tggctcactc ctgtaaccct agcactttgg gaggctgagt 160317822
gggcatttaa agtgatgctg atatacagcc agggctgaga actactggtc 160317872
taaaataatt gatgaataac atatccaatt ttctgtaggg agaagactca 160317922
cagggagacc ctaggatatc tccacacaga tcactgggga cttaaggagt 160317972
attacctaatt gccttgaatt atgtagaatt caaagtattc tggactctgg 160318022
gtcatccatc ctctaataca gtgcttccca atctttatca tgtcatgaga 160318072
cacatagaaa atgttatttg tatagcatcc tggcacatag agaaatgggt 160318122
gatattttca gggcatcctg gggtaaataa taagtaggct cctggctgga 160318172
ggtgactttg gaaaccctag gtttcctgga atgaggagaa ccaatgagag 160318222
cacatctctg atccattcga ggcttatcaa ttgggaagct ctgtttttaga 160318272
aacctcagag ttcttgacta acctcatcta aaaccggcca gaagcaagta 160318322
aagtcattcc caaaaagggc aaaaggaatg acgatccagg aaagctcctg 160318372
aggccaaggg catgtatgca tgtgttttta caaaggaaga ttcaaagcta 160318422
aaaccctgag ctagagattt agtggcattt cctagagaaa atataggttt 160318472
gaaaactttg gtgtctattg ttgtagaatc ttatgtatat ggctaaataa 160318522
ggttgagggc agagggcaaa aaaatgaagt tcacagaacc tttctggcat 160318572
ataatgagtc ctcttgctct cttttatatt ccattccctc ctgataacct 160318622
tcagatggag ctggggcaac agcttttcag ttcaaacta gaggtgcctg 160318672
tattcaccca aatatgttgt gacatcttta ggggataaaa gatacgaga 160318722
atcagtgagg caaagtcaga attgttaact atgggagctt taatttgact 160318772
cattctgtcc tggcagCTTC AATTAGTGGG GACACAAGGGG TTATCCACGT 160318822 [Thr70fsX18](#) [V75I](#)
AGTAGAGAAA GAGGAGGACC TACAGTGGGT ATTGACTGAT GGCCCAACC 160318872

CCCTTACAT GGTTCTGCTG GAGAGCAAGC ATTTTACCAG gtaagaacta 160318922 [p.P73Lfs*15](#)
gatgtatctg ctgggaaaac atccatagag ggaaagtctc agtgaacagt 160318972
cctcacactt attagtghaa acttcccttg gctgccctgg tctggtcagg 160319022
ggagagggca ggggtggtcct cagaaggaaa ggtgtacat caaaagaaat 160319072
gatcctgagc ttagggctaa atttcaccta cctgtccctg agtaaccctg 160319122
ggcatccctc ccctccctcc ctggggctcct tactcactaa agctctactt 160319172
tttagagcag atcattgtcc agactcagaa ttttagagact gaaagggag 160319222
aaataagtca acagtttgat tcccctagtt ccccatctgt ttccatcctg 160319272
caggcagaat gtcaggctgt ctgatacctt cctgtgttcc ttcatggaat 160319322
tcctttccta ttccagGGAT TTAATGGAGA AGCTGAAAGG GAGAACAGC 160319372 [T115fs](#) [R117X](#)
CGAATTGCTG GTCTTGCACT GTCCTTGACC AAGCCCAGTC CTGCCCTCAGG 160319422 [R117Q](#)
CTTCTCTCCT AGTGTACAGT GCCCAAATGA TGGGTTTGT aagtgtccca 160319472
aaggatcagg agagcctact gtcacctaag gctcactgtt gcttcggtct 160319522
tacgtctttg tgagggatgt atatgtgttt gtgtctgtgt gtagtgcag 160319572
taactgactc ccaaacaggg ggtagtgttt atttgcctt gctgctcatc 160319622
ccttccctct cctgcttccc cttcctttgc cttacctggc attatctctt 160319672
tttgtcacgt gttcacatcc ctaatcttac agcctaagac tccctgatac 160319722
cattgtcttt ctattttagt gtggatggta atagacttca tgcctacttc 160319772
tttgagtcac cacctccttt tgaactctta gtcccaactg aaagattctt 160319822
ctgccgtcac ctggttccta agtacttggg gtcccagtaa ccagtcccc 160319872
tattcccat ccttccctc agGTGTTTAC TCCAATTCCT ATGGGCCAGA 160319922
GTTTGCTCAC TGCAGAGAA TACAGTGGAA TTCGCTGGGC AATGGTTTGG 160319972 [I162Yfs*57](#) [p.Gln163SerfsX39](#) [S166X](#)
CTTATGAAGA CTTTAGTTTC CCCATCTTTC TTCTTGAAGA TGAAAATGAA 160320022 [F181S](#) [D185N](#)
ACCAAAGTCA TCAAGCAGgt aatgacactg ccagctccta gcaattccag 160320072 [c.582+1delG](#)
ttagaaagaa gattatTTTT ctagccagggt gtggtggtgt gtgcacgtag 160320122
tcccagccac ccgggaggct gagacaggag gatcacttga ggccgggagg 160320172
cagaggtttc agtgagctga gatggacca ttgactcca gcctgggtga 160320222
cagagcaagg ccctgtgtca caaaaaaaaa aaaaaaaaaa ggattatTTT 160320272

ataggctctc ctatttggag ggtggctcat tcttctggta cacctgctga 160320322
aagacggttg ctccaaaaag aaccaagacg ttagttcttc tcacattctt 160320372
tccccacatt ttgctcctac ctgatattac agcattaaag ccttttagac 160320422
tagaagaaaa tataaagaat atctgaaaga gtaatatgaa acaaggtaca 160320472
cagcccaggt taagaaccac tagtatcgtt aaaaaaaaaa gcattggatt 160320522
agagattgag aaattcaatt tggtaatttc tgagcttctt tttagctcta 160320572
atatgcctta attctggctc agtatttcca ttttgactca tagagtagtt 160320622
aagagatttg tccaaagttg tatggtgagt tgatctccaa gctgtgtcat 160320672
atctgatttc ctatctctag tttggtgctc tttgtatcag accacactga 160320722
atcttttcag tggctgaagc ttcaaattgg gccaggccat ctggaatggg 160320772
atagtttcat ctccagctaa accactgagt ctgcaaccct ttgtaactct 160320822
tgatgagttt ttttctttga ccttatagat cctatggtgg ttctaggata 160320872
actatagctc agggataaat gtctccgaaa aggggtgtggc tccatcccaa 160320922
aaggatggaa ctgggcctc ctcttctgg gatgtaaggg agggcctcca 160320972
caaactagct gtctcagtg ggtccatctc ccctttcagT **GCTATCAAGA** 160321022
TCACAACCTG AGTCAGAATG GCTCAGCACC AACCTTCCCA CTATGTGCCA 160321072 [P211R](#)
TGCAGCTCTT TACACATG CATGCTGTCA TCAGCACTGC CACTGTCATG 160321122 [Q216P](#) [S219Ffs*31](#) [c.687insCC](#)
CGGCGCAGCT CCATCCAAAG CACCTCAGC ATCAACCCAG gtagggcaga 160321172
tccgaacat gagggtaatg gaataagggg cagagggaga gtggaaccag 160321222
gccagggaat gttagagaga ctgtaatagg gaaggagtag acaccatgaa 160321272
ggagctctgc atgggagaac tagaaacaat tctgaaaaat ttaggcagct 160321322
tgttcctaaa gtggatagtg gcagagaagc caacctcgga ctgttggaag 160321372
tagagaaaac gacttagagt ccgtggggca ctggtcagag atttccaatg 160321422
ttgcctttat agctaccttc tcctttagcc ttgttgatct ctcatgtttt 160321472
gtgtcctgct tag**AAATCGT CTGTGACCC CTGTCTGATT ACAATGTGTG** 160321522
GAGCATGCTA AAGCCTATAA ATACAACCTGG GACATTAAG CCTGACGACA 160321572
GGGTTGTGGT TGCTGCCACC CGGgtgagtg ttggcttctg atcaggatgg 160321622
gcagggctgg cacaaaaaga gctggtaggg cccgctctag catatcagat 160321672

ttcaaagttg ctaaattggg aagcctcaaa tggggaggaa tctgggctgt 160321722
gggactcctg ggttgtctcc attgccacag gacaggtata ttctcttgac 160321772
tggagcaaga aaggaggttt ggggccagtt ttaaagtata tatcccctga 160321822
cttttcttct gttgtacct a gCTGGATAGT CGTTCCTTTT TCTGGAATGT 160321872
GGCCCCAGGG GCTGAAGCG CAGTGGCTTC CTTTGTCCACC CAGCTGGCTG 160321922 [c.887A>G](#)
CTGCTGAAGC TTTGCAAAAG GCACCTGATG TGACCACCCT GCCCCGCAAT 160321972 [A315V](#)
GTCATGTTTG TCTTCTTTCA AGGGgtaagg gctctttggc tggggtgcaa 160322022 [c.996+7G>A](#)
tggcagggaa gaaagaggat agtaaagatg agagtggcta ctggttgag 160322072
aagacctcag cacttgacct aagttgtaa ccagcacaga gcttctggat 160322122
gtgtctacat gtgtctcccc ttagattcc tccattttag gaagcttaga 160322172
ttccttcttt ttaggaagct tttacacct gaattggtat gtaaccagcc 160322222
ccctctttcc cccactgata agatatattg gaggcggcct tttactttta 160322272
ttctctggac tcctttactg ctatctccat ccaggagccg ttaggctcct 160322322
gactctcatc actaggacca cagcagaata agggaacagc atctgtggct 160322372
gagtcactgg aggtggggga ccgtaagaa tcagacacat aatagctgat 160322422
gttcatctta gacctttact aaggctactt tccccatttc tgggcttcag 160322472
aagtcttgta atacatatga gggatagtca cagctgggag gtggggccaa 160322522
gagaagccga aagtcacatg actgtaagct gactagcagt tgaggtgacc 160322572
tgagatagtc gtcttaccta cagctttgat gatctggccg ccttcgaggc 160322622
tctcctaacc ctttgaatc tctgttcccc ctcccaccta cctccatctc 160322672
tcagGAAACT TTTGACTACA TTGGCAGCTC GAGGATGGTC TACGATATGG 160322722
AGAAGGGCAA GTTCCCGTG CAGTTAGAGA ATGTTGACTC ATTTGTGGAG 160322772
CTGGGACAGg tatgtggc_a_ gtcccccagc cccttccttt ttaattaaat 160322822 [c.1101+1G>A](#) [c.1101+10A>G](#)
cttctcctt tgttgttctg cggctttaa_ tgcaggaacc accgcctctt 160322872
cccttgactt ctatccccta ggcattggcc agaacaggag actgattcta 160322922
agtgttgttt cttcatcctc ccccagGTG GCCTTAAGAA CTTCAATTAGA 160322972 [c.1125+1G>A](#)
GCTTTGGATG CACACA_GATC CTGTTTCTCA GAAAAATGAG TCTGTACGGA 160323022 [D381Sfs*7](#)
ACCAGgtaac ctgagcatct ccctcattt cctattccta cagctcagaa 160323072

tccagacccc aaccctgcc ctgtttccac caacccccag ggcctgtgag 160323122
acagggtaag agacaggatt ggattgggtg ttggccaaag gatgaacacc 160323172
acagctgttg ttgctgctgg gaagaatcag gaactcagtg acattccatt 160323222
ggttccttgg actgggtagt tctctgatca tttgttgctt agcagactac 160323272
cactgccccat taaggatagg tgagtgacta gctcccttct tgccttgctg 160323322
ccccatggat ccaattgtca aggctgctct acccaagtcc tggctgtgtc 160323372
acactcgtctg cccaacttgt cctccacttt cctcattgct tgttcaaac 160323422
cttcccttcc ctctaggtcc acctttaggc ctgctttttt ccaggtggtc 160323472
ctctttctgc aattccagcc ttcagcatca tccctgctct ggactcctgt 160323522
agcatttaaa gaattggta tctgtttggc attcagcacg cagttttcta 160323572
ttattatttg ctcccttcaa ttctgcacaa taaataataa gtgaagcatc 160323622
cactgaggat aaagcagagt cttgaagaca gtagaattta cttataaata 160323672
tgaaaaaaaa ggtctcttct ttatgcccc aatttctaac tctaaaaaga 160323722
atggtggaag ctacaggaaa ttcagagagc cttggtccca aaaggcttga 160323772
gggataaagg tctactagag atagggtagc tccccaaagca gggaaacttga 160323822
agtatagagc atttcaggcc taaaagagac ctctgcttc ccatccccc 160323872
gcctcccac agttaatctc cctcgtacc ccagGTGGA GGATCTCCTG 160323922 [c.1180-5C>G](#)
GCCACATTGG AGAAGAGTGG TGCTGGTGTG CCTGCTGTCA TCCTCAGGAG 160323972
GCCAAATCAG TCCAGCCTC TCCCACCATC TTCCCTGCAG CGATTTCTTC 160324022 [Q420X](#)
GAGCTCGAAA CATCTCTGGC GTTGTTCTGG CTGACCACTC TGGTGCCTTC 160324072 [p.Arg434X](#)
CATAACAAgt aagaatcact tggccctgca ccctcttcat tcttgaagag 160324122 [c.1352+1G>A](#)
agtctattct gcagtctggg aggaaggta ctgccctccg ctttcccaca 160324172
ctaccccctc cagaacttca ggtccatctg tattctttgc tcagtggcgt 160324222
ttcacatct gaactgaaac cttatttgt ttgactggat attcatctta 160324272
gaaactcatc ctcaccctta gccctttact gtcaacaatc cttggttatg 160324322
gttccactgc tccctagctc tccagggtcc tgagttcctc agggttgcca 160324372
gcagagggca tcatctcaa cacaagcatg ggaaggatgg tgggggcct 160324422
ttggctagaa gacagaaagc agtccttctc tggaaactcac ccagaggtgc 160324472

cagaaacagt attcatactc tgtgaaatgt accatgttct tgccatgtgg 160324522
tagatggcca tggttcagtg cgagggtaaa agtgcctcct atagctgatg 160324572
gggctccaga gatacaaagg gtaactctgg gttacccttt aactgctcct 160324622
aacttgaggc cttggataac aggggacttc ttactcaggc tggattgcca 160324672
agcttcccga gggccaaatg agtttcgtag tgaaaatgct tgagctctat 160324722
ttctgacccc agccaagtag caccttctca ttcatttagg ggagtgaccg 160324772
tcctagcact tagggtcagc tgtcttctct aaagctatcc ttgtaccact 160324822
ttggggcaag tgaagattca tcatttgaac acattttgga tttgattatg 160324872
tagctgactt gactttgtgt gggacagga tttactgatg gtaaagactg 160324922
tggagctcag cctctctttt aagatctatc tccttggggc tccataagga 160324972
tcatcatggt gattttatca gtgtattctt atatatcagt gagcagacct 160325022
gatcctaaga cctgctaadc acctcctgct cccagctacc ctaaataata 160325072
atgttcattg gaacagttat acaactgatc tcatgatata tggcagagtt 160325122
ctctgaaaat catcttagcc atccccata tctccagccc aatgatgta 160325172
gaagagtctc tcctttgttt aaagatctga gctcattcag cttttctacc 160325222
ttgtctgtca ggaaagtctt taattttcac taaccacctc accctcactc 160325272
ctacctccct gttctccaca cttctgcaa tatgggatcc tgattgtctc 160325322
tcaccctttt cttctgatgc tgaaaatgag atactgagtc cctgcataag 160325372
gagcatttga gggaggaaag gggcagagcc ctggctaaat gtagccaagg 160325422
ctcatgcccg ctttcctggc agATATTACC AGAGTATTTA CGACACTGCT 160325472
GAGAACATTA ATGTGAGCTA TCCCGAATGG CTGAGCCCTG AAGAGGACCT 160325522
GAACTTTGTA ACAGACACTG CCAAGgtagc actgagccag gctgggtggg 160325572
agcctggggc acacagtgaa gatgctagca tttgaggata ggagaggtgg 160325622
gccattcagc cccctcctca cctaccacag GCCCTGGCAG ATGTGGCCAC 160325672
GGTGCTGGGA CGTGCTCTGT ATGAGCTTGC AGGAGGAACC AACTTCAGCG 160325722
ACACAGTTCA GGCTGATCCC CAAACGgtaa gcagatgggc cctagctcct 160325772 [c.1551+1G>A](#)
tctttctatt tacacagcaa gctgtcccta tcctcccttg ccctagtgtc 160325822
ccaaaccttg gaattccaca tgactgttga tgccggtgag aatgcctcat 160325872

gccccagaga gctcttgggt gggcctcatc tgcatcttat gagccagcta 160325922
ctgtctccca actccagtct atctggccag tctggttcct gccccatgac 160325972
tgggtctcca ctgataattc tttccctggg ctcccttcaa gtcacaggg 160326022
tttctctctt tactgttcca atcctagGTT ACCCGCCTGC TCTATGGGTT 160326072
CCTGATTAA GCCAACAACCT CATGGTTCCA GTCTATCCTC AGGCAGGACC 160326122
TAAGGTCCTA CTTGGgtaag catctggtgt gggaaatggga cccttagctg 160326172 Y545X
aggaaagga tagagaaaa gtcttttgggt ttaaccttta ttattttttt 160326222
tctttttcct ctctgttttt cttacccccct gttttccttt ctttcttctc 160326272
atatttgatg gatccttttc cattgccctt ctttctggct gctgccaatc 160326322
ttgggctttt cctatttcac ccacatcca cccaccaaat cttcccttcc 160326372
ctttggtctg cactcagGTG ACGGGCCTCT TCAACATTAC ATCGCTGTCT 160326422
CCAGCCCCAC CAACACCACCT TAIGTTGTAC AGTATGCCTT GGCAAATTTG 160326472 Y565X Q568X
ACTGGCACAG TGGTCAACCT CACCCGAGAG CAGTGCCAGG ATCCAAGTAA 160326522 E584DfsX44 c.1768A>G
AGTCCCAAGT GAAAACAAGG ATgtgagtgg tgggtgggtgt tggaaagtgc 160326572
ctggggcccc tttcccttgg gaaagtggga ggttcttcta gacctagtta 160326622
gaccagggg attgggatgg agaggtggag agatgcagtc ctcagcaatt 160326672
gggtgttgaa aagcctgggt gaaaatggac catctgaagg gtaaagggac 160326722
agcagccagt tagctcaatt ggtagagca tggcactgat agagggtaga 160326772
gggaacgagt gagaagagga tcaccctagc cgtgtgttgt ggcgcatctt 160326822
ctgtgcagCT GTAIGAGTAC TCATGGGTCC AGGGCCCTTT GCATTCTAAT 160326872 c.1799delTG
GAGACGGACC GACTCCCCG GTGTGTGCGT TCTACTGCAC GATTAGCCAG 160326922
GGCCTTGCTC CCTGCCTTTG AACTGAGTCA GTGGAGCTCT ACTGAATACT 160326972
CTACATGGAC TGAGAGCCGC TGGAAAGATA TCCGTGCCCC GATATTTCTC 160327022
ATCGCCAGCA AAGAGCTTGA Ggtgagatgg ggcaggggca taggtggcag 160327072
ggatctgttt gacttctttc tctgctttct tgtgtcatat agccctttcc 160327122
atctcccatt tgccccacat ttgtagcaaa agcctactgc aaatctgtcc 160327172
ctggtcagcc agcatgttcc cttaggaggc cttttttttg agatggagt 160327222
tcattctgtg tgctcaagct ggagtgcaat ggcacaatct cagcttactg 160327272

caacctccgt cccttgggtt taagcagttc tcctgcctca gccttttcgag 160327322
tagctgggat tacagggcat tgtcaccaca cccagctaata ttttttttat 160327372
tttttagtaga gatgggtttc accatgttgg tcaggctagt cttaaactcc 160327422
tgacctcagg tgatccacct ttcttggcct cccaaagtgc tgggattata 160327472
ggcgtgagcc actgcacccg gccaggaggc ctttcttcac agatagtttg 160327522
agtaggtggt cattctggag agcccctgtg gatcccagaa ctctttcaca 160327572
gcttcaactc ccggctggca ttccccatct ggcacagctg ggatgagtca 160327622
gtctaatagta ccgagctcct gtcacaagtc agtaatgtaa gtgccgcaag 160327672
ggaaccaaag ccatgggccc tcctttcaaa atgcctaaaa tctaagtaat 160327722
acaagatgga agcaagaaca gagatgcttt acttctcttt tcaaattggg 160327772
agacaaagtc tgtaggctgg agagatgttg cccatgatta ttccatagtt 160327822
ggtgcttaga gccagcatcc gaattcccat ggctccaaac cccaaacagt 160327872
tatccaaaaa actgcactga gttctgagaa tgcctttgtc ctttctgccc 160327922
ctccctcccc ctgcagTTGA TCACCCGTAC AGTGGGCTC GGCATCCTCA 160327972
TCTTCTCCCT CATCGTCACC TACTGCATCA ATGCCAAAGC TGATGTCCTT 160328022
TTCATTGCTC CCCGGGAGCC AGGAGCTGTG TCATAC~~TGAG~~ GAGGACCCCA 160328072
GCTTTTCTTG CCAGCTCAGC AGTTCAC TTC TAGAGCATC TGTCCCACTG 160328122
GGACACAACC ACTAATTTGT CACTGGAACC TCCCTGGGCC TGTCTCAGAT 160328172
TGGGATTAAC ATAAAAGAGT GGAACATACC AAAAGAGACA GGGAGAAATA 160328222
AATAAATTGC CTCCCTTCCT CCGCTCCCCT TTCCCATCAC CCCTTCCCCA 160328272
TTTCTCTTC CTTCTCTACT CATGCCAGAT TTTGGGATTA CAAATAGAAG 160328322
CTTCTTGCTC CTGTTTAACT CCCTAGTTAC CCACCCTAAT TTGCCCTTCA 160328372
GGACCCCTCT ACTTTTTTCT TCCTGCCCTG TACCTCTCTC TGCTCCTCAC 160328422
CCCCACCCCT GTACCCAGCC ACCTTCTGA CTGGGAAGGA CATAAAAGGT 160328472
TTAATGTCAG GGTCAAAC TAATTGAGCC CTGAGGACAG GGGCATCTCT 160328522
GGGCTGAGCC TACTGTCTCC TTCCCACTGT CTTTTCTCCA GGCCCTCAGA 160328572
TGGCACATTA GGGTGGGCGT GCTGCGGGTG GGTATCCCAC CTCCAGCCCA 160328622
CAGTGCTCAG TTGTACTTTT TATTAAGCTG TAATATCTAT TTTTGTTTT 160328672

GTCTTTTCC TTTATTCTTT TTGTAATAT ATATATAATG AGTTTCATTA 160328722
AAATAGATTA TCCCACA cga cttgtactgc tagttattct tcccaggcca 160328772
ccttgttcag cgagcctaga ctggaagtca tgaagttatc ttttatgcta 160328822
tcatcttggg ctccagagga cccaaggagt aaggctctgt caaaaacagt 160328872
tgaagtcctt tcaaattgca gagccctggt tctcctcttg taagaacaat 160328922
gttaacatag tttcttctca ctttgtaatg aacgggcatt tttttttttt 160328972
tttttttttt tttttttttt tgagatggag tcttgctctg tcaccaggc 160329022
tggagtgcag tggcgcgatc tcggctcact gcaagctcca cctcccgggt 160329072
tcacgccatt ctcttgctc agcttccaa gtagctggga ctacaggcac 160329122
ccaccaccac gccagctaa tttttttgt attttagta gagacggagt 160329172
ttcacatgt tagccaggat ggtcgtgacc tcctgacct gtgatccacc 160329222
cacctcgacc tccc aaagt ctgggattac aggcgtgagc caccgcgcc 160329272
ggccatgaac aggcatttct ttattcactc tgagacactg gctggggtac 160329322
agagatgaag agaataaac cctaaccctc gagtagctca gctgggatga 160329372
gaagagagac agacattctc acaactacat gtaatccagt gtaataaaaag 160329422
gaataattgc agcatatccc aagtgctctg gtagcacata gtgaaactca 160329472
ggaccatgtc aggggtgaca ttcaagtgat gatttaaagc gttcaccagt 160329522
tgtggaagca cagagtcaag aaaaggagtg agtcatgttt gggagatggt 160329572
aagttcagtg tgtctgagcc ataagcatca gcaggaggcg aggttgggct 160329622
aaatcccga gttcttggct ggcatgctgc taaggagttt gggtttctgt 160329672
taatggtggg cctttttag gccaaaacaa gtttggactg ttttagaaaa 160329722
agaacatcac ctctgta

NCSTN (NC_000001.10, GRCh37) - gDNA - 2026-03-05

