



PSMG2 (NC_000018.9, GRCh37) - gDNA - 2025-04-03

cttaaacctg ggaggcggag gttgcagtga gccgagatcg tgccactgca 12702090
ctccagcctg ggcaacagag agactccgtc tcaagaaaga aaaaaaacct 12702140
gatatcttac agcagaatat aaacctccaa atacaactta cactcgatcc 12702190
gacttccaga agtcgctcgc taagcgcttc attctcacgg ccgtcctaaa 12702240
acgccaaagac cgctcgttct atcgccccag actcttgcta gcacctgctc 12702290
ggctcgtttt ctttctcggg gacgaggacg ctctcctgcc tcaaaactcaa 12702340
agctctgcct actctgcgtt gcgcacccca caatcctcgc tacagtcccg 12702390
gcaagcagat gccgctgtcg gcccgggggc gccgggcagg agggaaaggt 12702440
tatgggtcgg cccggcggtc tctcccagca cccgcgactc tcaccttgct 12702490
cagctgctgg tggatgagct gcttcagctc ggaggctttc tccggaggca 12702540
gcgacatgct ggagccggc gtctccccgc cgcttctccc cgcctcagat 12702590
gccctaactg cgcggccccg gccggggccag ggagcgtag gagcgactgg 12702640
agcacaaagc gccgcagccg ttcgcctagc gcagctcccg ggggacgcaa 12702690
cgccgcgtca ggccgggggc tgacctggaa atgaggcccc ggcggcggcg 12702740
gcgccaaactg ttttcaaaca gtggcggaca aacagggctt ggggctggcc 12702790
cgcacgctgc ctgatcgtt cgcgccgccc ctccacctcc ccgcgggccc 12702840
cgcacccccg gacctcagcg caccatcgc ccttgcttgc cagggtctcc 12702890
gaaagcgtg ctggcccctc ttcgcggcca cccggcggcc tctttccgcc 12702940
ctctgaaccg gcagttagct ggacgggctt caagggcccg gcgcccaggg 12702990
actcaaagga ccctcccgcg ccccgcgagg ctccggggtc tcgggcttcc 12703040
GCCTTCTTGC TGCCCTCGTT CTTGCCAGGG CCGCGGTTAG TCCCTGCTGG 12703090
CCACCCCACT GCGACCATGT TCGTTCCTG CGGGGAGTCG GCCCCGACC 12703140

TTGCCGGCTT CACCCTCCTA ATGgtgagtc tccatttgcg ctcggggctg 12703190
ccgcctcccc aggccctgc ggtgctgcca ccccgacgcg ggggtgttgg 12703240
cgggtgccttg ggagaaatag ggcactagtt tctatttcat gttttcggcc 12703290
ggaaaaaaca gggagggttg agccggaggc agccgtccaa acagaacctt 12703340
tgtcggctgt aaaaccaaac gtagtcaagt ctacaatttg tagtctctgt 12703390
ttcctgtaaa acgtgatgtg ttcgtacgtt ctagatacac tgtacttatg 12703440
ttttgcaggg catccttcag ttttatccta gaaagtcttt ctacgactag 12703490
ttttagaatt agtcttaagc tagcatatta tcgttgttaa ccggagaact 12703540
actgataggg caataaacat taactcttgc cggtagttag cgcagtttta 12703590
tcgctcttta tattcattca ttgttttaat aaagtctgtt atgtgcgagt 12703640
attagaataa gactaggtgc gtgccctcaa agaatttaca ctgtagttgg 12703690
aaacatgtaa tctaagagca ataaatgcta ggctagaagc ttgaaagggt 12703740
atagaaaggc cctgagataa ttgggagggg agggacagat ggcttgtaa 12703790
gaaaggcttt atagagaaag tagtatgcaa aagatggagg gccctgggc 12703840
tgggagtagg ggaaagtagg cgtttcagaa agatggatgt ctaaaacaga 12703890
gtcagtaagc agggggactt gaagactgcc aagaatttgg aatgacacat 12703940
tgagagagaa taggctgtag gccctgtgaa ccagaaggc accattggaa 12703990
aatgcactgt ttggagtggg ataaggctgg agagagctgg aagtgtcatc 12704040
cttattcatt acatataaaa cacacagccc cagagaagag tgtttcaaaa 12704090
aggagggagt ggccatgtca aaagtagccc agagatgtgt aaggtaaga 12704140
aagtgtatgt ttggatttag cgacatgtta atgatggca cctggacaaa 12704190
cagttaccag tgaagtggg aagaggaaag ccatattgga gtgggttgaa 12704240
tgaatgatag aaaacaagtt aaagatttgg gttgtataat atatattcag 12704290
tcattaattc agagacaggc atgatggctc atgcctgtaa tcccagcact 12704340
ttagaaggcc gactacagga ggatcgcttg agctcaggag ttcaagacca 12704390
gcctgggcga catagtata cctcatctct acaaaaaaat aaataaaaat 12704440
tagccaggtg tggtttcctg cacctgtatc tcagctactc gggaaagctga 12704490
ggtgggagga tcacttgagc ccaggaagca gaggctgcag tgagctgaaa 12704540

tcgtgccact gcactccagc ctgggcgaca gagtgagacc ctgtctcaaa 12704590
aaactttttt ttaataagag ataaagtttc tgcttatggt ttcgtggacg 12704640
acttggagaa tttttgctac atagagaaac aagaaatgag gttgcagtta 12704690
gagggctatg tggggctcaag ggagagcctt ttagaatgaa agatattaga 12704740
gcatgtttac gtgctgatgg gaataataca atattgtgag gaaaagaagg 12704790
atggtacaga agagtttaac ccaagtagca aaatcgttga gaaggaatt 12704840
gcaggagga actaggcaat tggtagtga caacagtga aagtgggaga 12704890
acatgctgag ggaacacccg aaggacagaa aacaaaagga gttggtgaa 12704940
gaatgcaaag gaggagctac attaaaagga tacttggggg atagcctcaa 12704990
taaaaattag gcatgtatta gatgtagttg gtaaggaat ggaagaagt 12705040
ttaggtagat tgaataatat tgaacttttt ttttttttg agatggagtt 12705090
ttgctctttt ttgccagtc tggagtgcaa tggcacgatc ttggctcact 12705140
gcaacctctg cctcctgggt tcaagtgatt ctctgcctc tgcctcccga 12705190
gtagctggga ttatagcat gcaccaccac gccagctaa ttttgtattt 12705240
ttggtagaga cagggtttca ccatgtaggc caggctggtc tcaaactcct 12705290
aacctcaggt gatccacctg cctcggcctc ccaaagtgct gggattacag 12705340
gcatgagaca ccatgcccgg cgcccttttc taaaatacaa aatatgggga 12705390
aaaatttggg caaaagttta tagttttgga catgtggaat gtgagtttcc 12705440
tgtgacctaa ccatgtggag acgtccatta ggttgtggag ctctacgtg 12705490
ttctgggatg taggtaggga tttggcagct tcattatttt aagtcatggg 12705540
aaaaagagag agagagagag agagagagag agagagtgtg tgtgtgtgtg 12705590
tgtgtgtgtg tgtttagtgt gaaaagatca cttcaacctt tcggaatggg 12705640
taaagaggca ctaataaagc aaatggtaag cagacccaag agtgcttctg 12705690
ttcatacctc gaagccttta cacttgcttt cccactgcct ggaatgttct 12705740
ttcccagatc tctgtacggc tgtctccttt acctttttca ggtctctagt 12705790
catttgtcac ctagggtgag tctttcctcg aacctctac ttaaaattgc 12705840
aatcaacat gtacacacat cctcacactc actttatttt tctccgtagc 12705890
aattaccact gtatatttta gtgtttgttt tgtttattac aggtaaacca 12705940

ctctcactgg aatggaagtt ccatgagggc atgaactttt gttggtttat 12705990
tttactgcat tcccagtgcc tagagcaaca attgacatat agtaggcatt 12706040
caataagtat ttgttaaata gtctcaaagg tggaggaggc cccagcagtt 12706090
gtagttaatg aaaatcaata tctagctatg atgttatgat gctttcagta 12706140
ctaataatac tattgtattc tgtctaaact ttttgaagtg ctgtgggcca 12706190
ggcgtgttgg ctcacgcctg taatcccagc actttgggag gctgaggcgg 12706240
gtggatcacc tgaggtcggt ggatcacctg aggtcaggag tttgagacca 12706290
gcctggccaa catggtgaaa ctccgtctct actaaaaata caaaaattag 12706340
ctgggtgtgg tggtgcgcgc ctataatctc agctactcag gaggctgagg 12706390
caggagaatt gcttcaagcc aggaggcaga ggctgcagtg agccaagatc 12706440
acgccactgt actccagcct gggagacaga ggcagactct gtttcaaaaa 12706490
ataaaaataa gtgctgctaa ttttggtgac ttactgaaca tatcttttat 12706540
aatttcagCC AGCAGTATCT GTTGAAATG TTGGCCAGCT TGCAATGGAT 12706590
CTGATTATTT CTACACTGAA TATGCTAAG ATTGGTTACT TCTATACCGA 12706640
TTGTCTTGTG CCAATGGTTG GAAACAATCC ATATGCGACC ACAGAAGGAA 12706690
ATTCAACAGA ACTTAGCATA AATGCTGAAG gtatgtaaga ctttaccttg 12706740
tatttttcca ctacaaagta gagttgtttt aaattagaaa tagactttat 12706790
tgataattgt tttgtagcaa atgtttactt agtgccaact ttgtgtagag 12706840
ttcacaacc aatcacattg tcctattcct ttatgtcctg gttttagttg 12706890
ttgttagcct cttgtaaatg gcaagtctta cgaaggttga gaataagatc 12706940
atacttgat cttttttttt tttattattt ttgagacgga gtctcgctct 12706990
cttgcccagg ctggagtgca gtgacgcgat ctccgctcac tgcaagctcc 12707040
gcctcccggg ttcacgccat tctcctacct cagcctcccg agtagctggg 12707090
actacaggtg cctgccaccg cacctggcta attttttgta ttttttagt 12707140
agagacgggg gtttactgt gttagccagg atggtctcaa tattctgact 12707190
tcgtgatcca accgcctcag ctttccaaag tgctgggatt acaggtgtga 12707240
gccaccgtgc ccagccata cttgtatcct ttctagaatt tttaaatttc 12707290
cttgtttttc aacatggatt ttttccctc tatcctcagt tttatctcct 12707340

gttcttactg gtatgtgtaa ccatcactaa taatatggaa aggcgaaaag 12707390
tagattgcgc tggactcagt cttgtaggtt taatatatgt tacgtcaact 12707440
aagtcttata ctcgtagtca tcttcttcca ttataggatc cataataata 12707490
tggatagat aaggctcaaa gagattgact tgcctgatgc cactaatagg 12707540
tgtaggcttt tcccatactg taaatctttg taattcctca ttggactatc 12707590
aggcttgatt aatcagggaa cactggttat aatgcagcac agcaccaggt 12707640
gagtaagaga agagctcctg ttgatcatga agcatgggag caccagtta 12707690
ctacctttga tggctaactg ttctggatgat ctttcagtct tctgtttacc 12707740
atthtaaggt caaatccaga ggtgacagaa gagcatgaaa ggcctttggg 12707790
gaattgaaag acaaatgaag aagcattttg gtttttgtgt cttactaacc 12707840
atatcattgt ttttagcttg cgatagtga atgtacattt gagaaatgac 12707890
cttattattg aacttcctac aggacagatg gctttgtcaa cgcaagacta 12707940
aatttgagtt actgcctcag aggataaagg actataaatg gttaaaacca 12707990
gaattcatga ccgggtgctg tgggtgcacat ctgtaatccc aacactttga 12708040
gaggctgagg taggaggaac gcttgagctc aggagtttga gaccagcctg 12708090
ggcaacaaaa tgagaccca tctttacaaa aagaaaaaga aaaaaattag 12708140
ccaacctgta gtcccaacct cttaggaggc taactaactt gggaggactg 12708190
tttgagcctg ggaggttgtg gctacagtga accatgatga tgccactgca 12708240
ctccagcccg ggtgacaaaag tgagaccctg tcttaaaaaa caaaagcccc 12708290
tagaatttgt aactttcca ctagtataa cagctatctt ttattgagta 12708340
ttactatgag ctaaagcca tgtacttttt tttttttaat gagatggagt 12708390
tttgctcttg ttgcccgggc tggagtgcag tggcgcgatc tcagctcacc 12708440
gcagcctccg ccttccagtt tcaggcagtt ctctgcctc agcctcccga 12708490
gtagctggga ttacaggcat gtgccaccac acccagctag ttttgtatth 12708540
ttagtagaga cggagtttct ccatgttggg caggctggtc ttgaactccc 12708590
aaaatcaggt gatctgcctg tcttggcctc ctaaagtgtc gggattacag 12708640
gcacaagccg ctgcgccag cggcgtttac atgtaattca tttaatcttt 12708690
acaacgttct tttttttttt tttttttttt tgagacagag ttttgttctt 12708740

gttgccagc ctggagtga atggcacaat ctccgctcac tgccacctct 12708790
gcctcccggg ttcaagcga tctcctgcct cagcctccc agtagctggg 12708840
attacaggtg cccaccacca caccgacta ctttttgttt ttgtgttttt 12708890
agtaaagatg gggtttcgcc atgttggcca ggctggcttc aaactcctga 12708940
tctcagatga tccgcctgcc tcgtcctccc aaagtgctgg gattacaggt 12708990
gtgaggagca actgcgccc gccccgtaa actttatttt atttatttt 12709040
atattttat tttgggtgtt ttttgagaca gtctcgccct gttgccagc 12709090
ctggagtga gtggcacgat ctccgcccac tgcaacctct gcctcccggg 12709140
ttcaagcga tctcctgcct cagcctcctg agtagctagg attacaggca 12709190
catgccacca cccccggctg attttttgta tttttagtag agacggggtt 12709240
gcaccatgtt agccaggatg gtctcaatct cctgacctcg tgatctgcct 12709290
gcctcagcct ccaaagtgcg gggattacag gcgtgagcca ccgcgcccga 12709340
tttgagatgg agtctcactc cgtcacacag gctggagtgt ggtggcggga 12709390
tctcggctca ctgcaacctc tgccctcctgg gttcaagaga tgctcctgcc 12709440
tcagcctccc aagaagctgg gattgtaggc actcaccaca caccagcta 12709490
attcttgat tttttttttt ttttgacaga gagttttgct cttgttgccc 12709540
aggctgtagt gcaatgccac gattttgggt cactgcaacc tccacctccc 12709590
gggttcaagc aattctcttg cctcagcctc tggagtagtt gggattacag 12709640
gtccacgccc ccacgcccag ctaatatttt gtatttttag tagagatgag 12709690
gtttcaccat gcaagtcagg ctggtgttga actcctgacc tcaggtgatc 12709740
caaccacctt ggcttccag agtgctggga ttacaggcgt gagccaccac 12709790
gcctggccta atttttgat ttttagtaga gacagggttt caccatgttg 12709840
gccaggtggg tcttgaactc ctgacctcag gcagttcacc cgcctcagcc 12709890
tcccaaagtg ccggaattac aggtatgagc caccacgccc agccctcata 12709940
aacttttttt tttttttttg agatggagtc ttgctctgtc gccagtctg 12709990
gagtgcggtg gcacgatctc ggctcactgc aagctctgcc tcccgggttc 12710040
acgccattct tccgcctcag cctcccaagt agctgggact acagacacc 12710090
gccatcacgc ccggctactt tttttgtatt tttagtaaga cggggtttca 12710140

ctgtgtagc caggatggc tccatctgct gacctcatga tctgcccgcc 12710190
tcagcttccc aaagtgctgg gattacaggt gtgagccacc acgccccccc 12710240
cttttaaagc atctgtgatt tcaccattta tctacccaag cttcaccata 12710290
aatttgatgt tcttgcttca gtttaagcag aattcatggt gctgtgatag 12710340
gggcacttaa tgccttatcc ttcttagtgc ctcaaaccag atccttttca 12710390
ggcgtgttac agcaagtcag tacaagttta ttttggtgca aaatgttttc 12710440
gtaagtacac atttcctgtg aactttttga agaccctca tatatccgat 12710490
tgttgtgctg tgccttgaa atctctttta ctctagagca gtcccttttt 12710540
tttcatcaca aaccgattta ttgaagaaaa gactaggtgt attgttttgt 12710590
acaatgtccc accttctgat ttgtctgatt acgtcctctt gtcacttggc 12710640
ttgttgttct agcccctgtg ttttctgtaa ctggagttag ctctaaaggc 12710690
ttgattagat aaaaggtaa tgttttgggg cagaatacag aaaagggtgt 12710740
gttgctttcg taatgtatca catcagaaga aaaaagtact aggaaacagg 12710790
aacctaacia caaaaagaat tgcataggcc gggcacggtg gcccatgcta 12710840
gtaatcctag cgctttggga ggccaagacg ggtggattgc ctgagctcag 12710890
gagttcgaga ccagcctggg taacatgatg aaactctgtc tctactaaaa 12710940
tacaataaat taaccggtg tgacggtgtg catctgaaat cccagctact 12710990
caggaggctg agacaggaga atcgcttgaa cccaggagggt agaggttgca 12711040
gtgacccgag atcacacat tgtactccag tctgggtgat agagcaagac 12711090
tctgtcttaa aaaacaaaca aaaaacaaaa attagccagg cgtggtggtg 12711140
tgctcctgta atcccagcta cttgagaggc tgacacacaa gaatcacttg 12711190
aacctgggag gcagaagttg gagtgagccg atatcgcacc actgcacttc 12711240
agcctgggtg acagagcgag actctgtctc aaaaaaaaaag aattgtatga 12711290
tacgctgatg aggagagtat tgctatcacc gaagaagtgg tagcttacat 12711340
tttaaaaagc ttagcctgtc caccccctac agatacattc ttttcaaacc 12711390
taggtcagtt gaattggact acatgtgttt gtcacagata ggtagaggc 12711440
tgagtaatct ttgccttagt ctcttttccc taaatttata cccttttccc 12711490
taattcctaa acttcctttg gactgaacat acctggtgct tgctagattt 12711540

gctgagttca gcataccccc cagtcacacc acatcacgcc agccatagga 12711590
gacaatttcc gaaagacctg taacagtaga gacctgatcc accaaaggat 12711640
ttgctgttat ttgcaatctg tttatggtaa ccaacactta ccccttagca 12711690
cagtagtaat cctgtgtcct tagagagtat tttatccctg actcaggagc 12711740
ttctcattct tttttttttt tttttttttt gagatggagt cttgttctgt 12711790
tgcccaagct ggagtgcagt ggcgcgatct ctgctcactg caagctccgc 12711840
cccccggtt cacgccgttc tcctgcctca gcctcctgag tagctaggac 12711890
tacaggtgcc cgccgccaag cctggctaata ttttttattt tttagtagag 12711940
acgggggttc attcaccatg ttagctagga tgatcttgat ctctgacct 12711990
tgtgatccac ctgcctcagc ctcccaaggt gctgggatta caggcgtgag 12712040
ccaccatgcc cagctgcttc tcattcttag aatgaagt gggcagggaa 12712090
gccttaagca tttctagagt gtgccccttg tagaacctga tgaaagctat 12712140
ggatcctttt ccagtaaaa aatacaaa caattgactca catgacattt 12712190
tatgttattt cagatccttt aaaaagttct aaggaacaca catgtaccta 12712240
tttcaggatt ttattacatg gctaacattc tcctaccttt tactgttttt 12712290
tctgttaatc ccaatgagtg ttgctgttct ctggagacaa agaggggaga 12712340
atatcaaaag ccaaaaagtt cagttttctt aaggatgatt ttatttgtca 12712390
taataccaga aattttcagg ggaatacttc tctggttttg cagttaaagt 12712440
caaaagaaaa ataatttttt atattttctt acagttaact tttcagaaat 12712490
gaatctgttc catagaataa agcccactgg cttattttta ggtacttcta 12712540
aaaggtctta ttttaaccag atgtcatata tgttccgat ttttaattatt 12712590
gaaaacattt aaatgcaaaa ggtattataa ttcaattttt gtttatcata 12712640
ataatttcaa cttgtataac ttcactgtca tatgatttca ttttcttctt 12712690
gtttttatag **TGTATTCATT GCCTTCAAGA AAGCTGGTGG CTCTACAGTT** 12712740
AAGATCCATT TTTATTAAGg ttagtatggt gtagtttgcc tttttgttta 12712790
ttaaagtgta atgagaaaat aagtaacatt agggattaag attcaaaaat 12712840
tactactggt tttaccatat gtacagttaa gatctgattc tacagagaaa 12712890
taatcttaca atatttcaga tgtgttactg tcttttcatg attatataga 12712940

aaggaagcag ggcttttatc ttgagtgtta acatattttc agttcgggta 12712990
gcattggtga aaaaatgtaa gcatattaat attagagggtt tattccattt 12713040
gtattacctt tcagctgggtg gcatctacat ataaactatg tatatatcaa 12713090
attatgtata tgtcataaaa tattctgaat ccgacttctt tcctcctcca 12713140
ctgctgtcat tgagtgcaaa ccagtgtcat cttcatgccc ctgactaact 12713190
tgctgatctg cctcccacaa acagcagcac tgatgatcct ctaaactgtac 12713240
accacatcac tactctcttt gaaaccctcc agtggcttct cctctcactc 12713290
aaaattgtga tccaggaaaa ggggctcgct tcctgatgca ctgtgacacc 12713340
aggtttttga gacaagaaa gctttatatt gcaaattgac tcccaaggag 12713390
acaggagtgc acctcaaatc tgcctccctg tgctgacttc aaggcagtgt 12713440
ttttattaga aaaggttcag aggggtggatt ctgagatcag taggtgagcg 12713490
atggaaggaa aggggacatc tggaaggtcc ttgggcatgc acagttatct 12713540
cctcatgcta actcataggg ctcatgtgcc aattcagggg aatgagtatg 12713590
aaacgtgatg gagagtcagc ttgcgacacc aggaagcttg ttctctgcag 12713640
actctacttg gccatattgg ttccaaccaa tttcagccag ttcttttatc 12713690
ccataagggg aggaagtttc agtattttac caagtagttt cttatctgct 12713740
accctgcaaa ctcaataatt tctttctttt tttttttttg agacagtctc 12713790
ctctgatgcc caggcttaag tgcactgatg tgatctcaac tctactgcagc 12713840
ctctgccgtc ctgggttcaa gtgatcctcc tgcctcagcc tctgggatta 12713890
cagggacacg ccaccacact ggctaatttt tgtattttta gtagagacgg 12713940
ggttttgcc a t gttggccag gctgggtctcc aactcctgcc ctcaagtgat 12713990
cccccacct tggcctttca aatgctggga ttacaggtgt aagccacgcc 12714040
cagtcctaac tcaagaattt gttagtcatg ggtttcttta actctttgag 12714090
gatggtttca aattcacagc cttactgtg gcctatgagg ctgtatatct 12714140
gtgctaatac agtagccact agctacatgt aactatttac agtttaattc 12714190
ataaatttaa aattcagttc ctcacgttcc aagttcgag gagccccata 12714240
tgcaaaaagc cagcataaca agagtcatgc tcacaggagc tctgccagac 12714290
tgctgctttg cagagcctaa cctgcagcca cactggcttc cctgtgttgt 12714340

tagacattaa gctcatcctg tctcagtctt tccactagct tctctgccga 12714390
aattcatttt cttagagact ccaatgggtt gcctccttta ctgttttctt 12714440
aaatgtttct tcatgagaaa ggccctccta aacaatcctt tcttcctttt 12714490
tttttttttt ttccttgaaa cagggtctct cttgctctgt caccaggct 12714540
ggaatgcagt ggcgtgatct tggctcactg caacctctgc ctcccaggct 12714590
caagccattc tccaacctca ccctcccag tagctgggat tacaggcatg 12714640
caccaccaca cccggctaatt ttttgattt ttttgtagag gtggggtttc 12714690
gccatgttgc ccaggctggc cttgaactcc tgagctcaag cagttcatgc 12714740
ttcagcttcc ccaaagtgca atggcgtgat ctgagctcac tgcaacctcc 12714790
gcctcctggg ttcaagtgat tctcctgcct cagcctcgca agcagctgga 12714840
ttacgaacgt gtgccattgt gcccggttaa gttttgtatt tttagtaaag 12714890
atggggtttc accatgttgg ccaggctggc ctcaaactcc tgacctcagg 12714940
tgatccacc actccacca cctcagcctc ccaaagtgct gggattacag 12714990
gcatgagcca ctgtgcccgg ccctcttttt ttttgaggca gagttttact 12715040
cttgtcacc aggctggagt tcagtggcgc aatctcagct cactgcaacc 12715090
tctgcctgct gggttcaagc gattctcctg cctcagcctc ctgagtagct 12715140
gggattacag gtgcccgcc ccacacctgg ctaatttttg tatttttagt 12715190
agagatgggg tttcacctg ttggccaggc tggctcaaaa ctcttgacct 12715240
caggatgatct gccgcctca acctccaaa gtagtgggat tacagggtg 12715290
agccaccaca cccagccgaa agtaagcttc tgaaaggaat gatgaagtgt 12715340
catttacttt tatatcccca gtcataaga tagtgtcatg cacatagaga 12715390
agctctcagt aaatatttgc taagggattt tttggaatga cctgaggtat 12715440
catcttttca ggaggttaga aatacaggat ttttagtgaca tggttaactg 12715490
catagtactt tttattttta cttttctttt tgagatggag tcttgctctt 12715540
gtcgcccagg ctggagtgca gtggcgtgat ctcaggtcac tgcaacctcc 12715590
gtctcctggg ttcaagcaat tctcttctct cagcctcctg agtaactggg 12715640
attacagggt cccgccacca cgcctggcta cttttgtac ttttagtaga 12715690
gttgggggtt tgccatgttg gctaggctgg tctcacactc ctgaccttag 12715740

gtgatctgcc caccacagcc tcccaaagtg ctgggattac aggcgtgagc 12715790
cactgtgctc agccattatt ttaacttttt atcgaagtat gacgtacatg 12715840
agaaaagtgc acaaatacata aatatacagc ttgggtgaatt ttcattgcagt 12715890
aaaccctctg tgaaaccagc tttcagatca agacatagag cattgtcagc 12715940
attccagagg accccataat gcgtcctagt cagtattcta ttgggtggaat 12715990
tctgtggtat atacttacag catctagctt cctttcttaa cattcccttt 12716040
gcggggttca cccatgttgt tggaagtagc catagtcatc tcgttctcat 12716090
ttctctgtgg tgtaagtgt tatacataag ccataatttt tccatggtac 12716140
ttttgatgct acatttgatt atttccagtt tgagactatc atgaatagtg 12716190
ctgctaagat tatttttaat tcttatacta gaatcactgc tttctttagt 12716240
taacattata tacccaaagt tttgcagtta gagttggtaa catttttaca 12716290
ttgtgccaca tggctttttg ttctctttct aatcagtgtg agttgaaaaa 12716340
ttatttaacg tataatataa atttttggca gctggaagta aagagtgaat 12716390
tttttttttt tttttttttt gagacggagt ctgcgcctgt tgcgcaggct 12716440
ggaccgcagt ggcatgatct cggctcactg caagctccac ctctggggtt 12716490
cacgccactc tcctgcctca gcctcccag tagctgggac tacaggcgcc 12716540
caccatcacg cccggctaatt ttttttgat ttttagtaga gacggggttt 12716590
caccgtgtta gccaggatgg tctcgatctc ctgacctgt gatctgcccg 12716640
cctcagcctc ccaaagtgct gggattacag gcgtgagcca ccgtgcctgg 12716690
ccacaagact aatttcaaaa tagcaaacat ttattgagca ttgattcttt 12716740
gtgctgatac tgttctaagt accttatatt tattacttaa tcctcatgac 12716790
aaacctataa gacagatact aatattatcc ttatttttca aaggaaacac 12716840
tgaagtacag aaagattaag caattgcctg acacatgatc ttagggaggc 12716890
aggaccagca ctctaacca ggcagcctgg ctccagagct tgcctttttt 12716940
cttttacttt tttttttttt tttttttttg agacaggggtg tcaactccacc 12716990
caggctggag tgcatggca caactatggc tcactacagc cctgacctcc 12717040
gaggctcaaa tgatcctccc acctcagcct cctgagtacc tggggctaca 12717090
gacgtgcact accatgtgta ataatttttt ttttttttgt agtaacaggg 12717140

tctcactata ttgcctaggc tgggctttaa ctccctgggct caagtagtct 12717190
gcccaccacg gcctcccaaa gtgttgggat tacaggagtg agccaccttg 12717240
cctgtcccag agcctgcctc tcttaactgc tgcactagac taccttctta 12717290
ttttaaagt tagcctgcat ttctcttacc tgcattttaa attttattga 12717340
gtagttatth tatgagcagt ctttgaaaaa ttttcataaa gcgggctccc 12717390
cctgaaatth tataaccac attccagatt taccagctgt gaatgtcttg 12717440
ccacacctac ttgatctctc gctatgcgcg tacacagtht ccttcttcga 12717490
aacaatccag aagtaggcta gcaatggtca cccctacata cttccgcaca 12717540
catctttcaa gaacaggaca ccattaccac acccaagaaa accagcatht 12717590
aatgaattht ttcaggagta tcatccaaca tactcaaatt tccacagctg 12717640
ttccgaaagt atccttcaat tctggatcca ttgatggthc acaggthtga 12717690
thtggctgth acatcttht agthgthtct cttcagagta aaactggcct 12717740
gcccctctth cthtcttht aatattgact cthtthgagga accggggctg 12717790
gatgtggagc attctccatt catctgattg thtccatgtg accagathcg 12717840
ggtcacaath thctggcaag aacccttcac agatgaccat gtattgthta 12717890
ttaggthaaca atagattact caagtagaga actgggaaat tgtcctthgt 12717940
ccatcacaath agathththt tgaaatctag attcctcatg attcattgat 12717990
thctthtctth thtctththt cthtthththt thtththtgag aaagthtthc 12718040
tcgthtccc cggtggagt gcaatggcac aatctcgtht cactgcagcc 12718090
thcacctcct gggthcaagt gattctcctg thcagcctc ctgagtagct 12718140
gggathatag gtgcctgcca ccatgccccg ctgathththt ththththtagt 12718190
agagatgggg thttaccatg thggccaggc thgtctthgaa ctctthgacct 12718240
caggtgatcc gcctgcctcc caaagtgctg ggactacagg cgtgagccac 12718290
catgcatggc cattgaththc thtaattataa agatacatta gataathcat 12718340
thgtctththt cattcaththc cggththtaagc acagthaagtg gatctgaaaa 12718390
thaaththcagt atataathh thataatcat thacacataa agththgathgaa 12718440
athgathatata gaathththgt atgctcthaag actaactthth agathththctth 12718490
thththctct caathgthgt caaagTATAA ATCAAAGCCA TTCTGTGAAA 12718540

AACTGC TTTC CTGGGTGAAA AGCAGTGGCT GTGCCAGAGT CATTGTTCTT 12718590
TCAAGCAGTC ATTCATATCA GCGTAATGAT CTGCAGCTTC GTAGgtatgt 12718640
ttctgcctct ggaaagtatt ttttggtatg gtttatacta tgataatttc 12718690
tctattaaaa agttaaactt taaaagccac gtagatcctt acctcttctt 12718740
actggagttt agaaagaggg gggtaagaga aggtcaggag atgggagggg 12718790
gtacagttag gcagatcttt tcagttcctg tgagcttagt agagttgggg 12718840
catggggaag acatcgtgta gagagagaga gtttgggaac catgttttta 12718890
gtgtttcccg tcacatacat ggcaacatca cagagctcag ctaattgaag 12718940
agaataagca gaaaaggtac tcaagattta taaagttgct aacttttgaa 12718990
aggttaatat tttcagttat ttccatatgt taccttgaaa gattaatatt 12719040
ttcagttatt tccatatatg ctaccatttt ttaaaaaaca tttacttttt 12719090
gtagagacag ggtctagcta tgttgcccag gctggtctcg aattcccagg 12719140
ctcaagcagt ctgcctgcct cagcctcca aagtattggg attgcatgtg 12719190
tgagcccccc gcacctggcc acatgcaacc attcgtattt gcagaaatcc 12719240
acttgcctaa agggtagctc cctggcatgt cagagtgagt tcttaaagt 12719290
aagacagagt atcccagaaa tagaactata agctatcatt accacataaa 12719340
gttgataaca tatcatatag aatactctta tactctaaga ttagctttt 12719390
atattttat ttttgagacg gagtcttgcc ctgtcaccca ggctggagtg 12719440
cagtggcatg gtctcagctc actgcaacct ccacctcctg gattcaagcg 12719490
attctcctgc ctcagcctcc tgagtagctg ggattacagg tacctgccc 12719540
cacgccagac taatttttgt aatttttagt gaggctgggc ttactgtgt 12719590
tggccaggct ggtctcaaat ttctgacctc aggtaattcg cctgctgggt 12719640
ctcccaaat gctgggatta caggcatgag tcaactgtgcc cgtccccagg 12719690
atgtagcttt tttttttttt cctctttttt tttttgagac ggagtctttc 12719740
tcagttgcc agttctcagt tgcccaggct ggagtgcagt ggcgcaatct 12719790
cgagtcactg caacctctgc ctctgggtt caagcggtt tcctgcctca 12719840
gcctcccag tacttgggac tacaggcgca tgccaccaca cccggcta 12719890
ttttgtgtt ttttagtag acaggatatt ggccaggctg gtctcgaact 12719940

cctgacctca ggtgatttgc ctgcctgggc ctcccaaagt gctgggatta 12719990
caggcatgag ccaccacgcc cggccccaag atgtagcatt tagatcattt 12720040
atTTTTtatt ttttattctt ttggggatgg agtctcactc tgtcaccag 12720090
gctggagtgc agtggcacag tcttggctca ctgtaactgt ttagatgat 12720140
gtagatcata acttttatca cttagacacc tataaaacca ggatgaaaaa 12720190
ataccaacia gccaaagatt acctttcaaa atgagctaata ttccaggact 12720240
ttcacaaaag acattacagg cttcatggca gaaggaggga aagctgtggg 12720290
aaatTTTTgc aatgggcttg cctaagtgtt tctgtctttt tatattgtct 12720340
cctaagtaag taagtaagta gcaaatcaga gcaatatttt ttacttaagt 12720390
ctgctgaaac ttgtgttttg cctgtgcagc agaatatatg gagaccaaga 12720440
gaatTTtagc taaagaaccg atgtttgctt tagagtTTTT aaaaagttaa 12720490
ctatatgatt atttctagTA CTCCCTCCG GTACCTACTT ACACCTTCCA 12720540
TGCAAAAAG TGTTCAAAAT AAAATAAAGA GCCTTAACTG GGAAGAAATG 12720590
GAAAAAGCC GGTGCATTCC TGAAATAGAT GATTCCGAGT TTTGTATCCG 12720640
CATTCGGGA GGAGGTATCA CAAAAACACT CTATGATGAA AGgtgagttt 12720690
gtttgcctgt tcatttgttt cccactttac ttaaaaaatga aattaatgca 12720740
gtgagctgag atcgtgccac tgcactctag cctgggtgac agagcaagac 12720790
tctgtctcaa acaaaaaaca acaacaaaaa aaacaaaatt aagtcagaga 12720840
atgtattgga ttacttactg aaactttgag aatatattgc taggccgggc 12720890
acggtggctc aacttgtaa tcctagcgtt ttggaaggcc gaggcaggcg 12720940
gatcacgagg tcagatcaat caagaccagg agatcgagac catcctggct 12720990
aatatggtaa aaacctgtat ctactaaaaa tacaaaaaat tagctgggcg 12721040
tgatgggtggg cacctgtagt cccagctact cgggaggccg aggcaggaga 12721090
atgggtgtgaa cccgagaggc ggagtttgca gtgagccgag atcgcgccac 12721140
tgcactccag cctgggagac agcaagactc cgtctcaaaa agaaaaaaag 12721190
aaaaatatatt tacaaaactg gtactattgt agagctcttg catttagggg 12721240
aaagatttaa acttggttat agaagaactg gtttctcaaa agccatattt 12721290
aatgctttta ttttgtgtga ctttttaggg attctaatac ttattctttg 12721340

caacctctac acgcgcactt tttttaatt gtggtaaaat atacatcgtg 12721390
caaaatttac atttatcaca cattttaact atatttaagc gtacaatcaa 12721440
gtgccattaa ttcacagcat ctgcatccat cagcactgtc tacttctaga 12721490
actttgtcgt catactaaat taaaaaatct gtaccataa ataataactc 12721540
ccaactttat ttctgtaaaa ttgggtttga tgttcccatt ttcatttctt 12721590
attttaataa tttgagtctt ttcttttttt tcctagtcaa gctagctaaa 12721640
gatttgtcag ttttgttttt ctttgaagaa ccagttttga ttttgctgat 12721690
tattgttttt ctattctcta ttattctatt attctctatt atttctctct 12721740
tacctaactt ttattttttt ccgctagctt tggatttgat ttgctttttt 12721790
ttctcttttc caaggtgtaa acttaggtta ttaatttaaa agtttttttc 12721840
tttttactg aatgtgttta cagctgtaaa ttttcctctt agtgctgttt 12721890
tcactgcatg ccctgggatt tgacatgtcg tgttttcatt tcactcatc 12721940
tcagtatttt ctcatthccc ttgtgttttt gttccgtgtt cctctcttgt 12721990
cccccttga aacacctacc tcctttctaa gagtcaactt acccttcacc 12722040
tcctgtctgc aatcttgcc tttcctgtct tctagacaag gaagttgcgt 12722090
ctgcactccc actgcactcc acctcttcta tactttgttg cacttacttt 12722140
accaatcaat cctcctaaac ttttgcttct gaccaagaca gagtaactga 12722190
tatcagactt gccctcctgc cataaaaaata ctggaacctg acaatttatg 12722240
aaacaactgt tttccagaca ttggactaca ggcagcacat agctgtcatc 12722290
cctaagagaa ggcaaatttt aagtctacag ttgcctggct ttctgcttga 12722340
gatactttct ggactgcagc acagggagcg gaacccaagc agagctgagt 12722390
ggaggaaatc agttaagact acagggaggc cgaggcaact ggaaatacag 12722440
ggcagagaat ccgagggcag ggggtgctgt catcagagtc caggggtctg 12722490
tttccttggg tctgtcttct tgggtatagg gtgaaactat gaggacaggc 12722540
aaagaacagc ttctggttag ctataagctt gccacaaaag ttagcgggtga 12722590
taaacagaaa gtattataaa agttagacct actcagcatc aaacattcag 12722640
gaaatgcgga ttttaccctg aagaaacaat atttaaaata ctcagttgta 12722690
tcaaccagaa taaaatagtt ccaaataaaa aagtaataat aatagtcac 12722740

ctctgccttt ctttttagca gaagaccaga gggtaatatt gaaatgatta 12722790
tcccacactg tgtgacaaac taataagagg cgcgataagc tgaagagcat 12722840
accctgcgc tttccaagtt agagccttga aaatgcaagc acagcctcgg 12722890
agccagcctt ctccaggcga gagccttgcc tgaggccatc acagcagacg 12722940
catttaggaa ctggaatfff ctgagccatc agagctcata gtggttccat 12722990
acaagattg agagccccta aggtgtttga gaaccaagta ctgggctagg 12723040
gtgagtgagg ctaacagttt ctactttgta gtttttagag acagaaacta 12723090
aagttagcct ggtatcatct gagacttccg aatgtatata tcagagtctc 12723140
ctcggcctt ttccttcctt agaactcggc tcacttttat ttctgtagct 12723190
ctcttctctg tcagtctcgt gctttcaagt tttggcatgg catttttctc 12723240
atagttcttg gttttagggt gttaggagta atttttgcat ttattggcaa 12723290
gcaggaaact ttttgccttg gtgtatctcc atctcatcac tagcttgagg 12723340
cgtttatagt atgataggag actatgtttt ggagtttagag agacctaact 12723390
agatatagtt agatatagag accttactag atatagaact ttgggcatgt 12723440
taactatgta ttaaactctt ttttcttcat ttgcgacaga gtcttgctct 12723490
gtctcacgca gttctcctgc ctcagcctcc tgagtaccta caggcacatg 12723540
ccaccatgcc cagctaattt ttatattttt agtagagacg gggtttcacc 12723590
atgttggcca ggctggctc gaactcctga cctcaaatga tttgccacc 12723640
tcggcctccc aaagtgctgg gattacaggc ttgagccagc gcgcccagcc 12723690
tgtattcaat ctctttaaac ctgttacctc ataaaagtag ctaatacttc 12723740
tttcatattt actgtgtggt cactgtttta agcattttgc ctccactacc 12723790
tcctttcagc ctcacaacaa cctgtgaagt aggttcatt atcatcccc 12723840
ttttatagat gaggaacacc cctggttaag taacttgccc aacatatctg 12723890
gtaagttgaa gagctagaat ctgaatcctg gtgtctgtct ttgttcccg 12723940
tattcctaac tgattcactt ataaaatgga gctaattata gcttcttcag 12723990
gattattaca gggattgtca taaaatttgc agataatgct taacacataa 12724040
taaccactca gcgttttcgg aagaagtagg aacttttatt tcctttaatg 12724090
attccattct cttccacagt ttccctcact gctttagata gtaactaggt 12724140

gttattttct ttcagtctct gctgtggtgc ttctgaaaat tactgtcttc 12724190
tgaagtaggt ttggggagta ggtcagaaca taccttatct gctgtagcca 12724240
aggacagaaa ggctggtttt tcatgcagcc atggggtgag gcatgattgt 12724290
gctgtttccc cagtgggtgt tacaggggcc tgctctcaca agtagaaaac 12724340
tctgtgtggg gcgaaggag atgataagt atcttatggt gtggcgtctt 12724390
ttcctttcct aaaccaggta ggttatcgta gctgtaaaaa cagacacact 12724440
agagtcagct cttgtaccct atgaaagaat actgattctt atttttatth 12724490
cttgtagCTG TTCTAAAGAA ATCCAAATGG CAGTTC TGCT GAAATTTGTT 12724540
TCAGAAGGGG ACAACATCCC AGATGCATTA GGTCTTGTTG AGTATCTTAA 12724590 [N213S](#) [Y223Sfs*2](#) [N225K](#)
TGAGTGGCTT CAGATACTCA AACCACTTgt aagttctatt atagcttaag 12724640
cctcttcttt gtctggttgt attcattaac tcgcacttta tatactacct 12724690
aagtagacca agtaagtga cgtttgtatt aaatatagac atatctttac 12724740
ataaaattta gtttaagctg aacttttgaa aattagagga cagttaacca 12724790
acctattatt tacagttttt tcattaaagc tgactttcca aaaaggaaaa 12724840
tccttagttc ttcattgtac ttactattca tgttagatta attatgccag 12724890
acatagtctt gcaataataa acaagccttc tgtggaattc aggaattttt 12724940
ttagggaagt aaaaagtatt gctatgtgag caatactgta gctattgaat 12724990
atgtattaca gttgatattt ttctctatta tgaaatgaga gcattacacc 12725040
caggaagt agttagcctt taggcataac agaacactga gcataaggct 12725090
gctttctaag atgggtaact agctttttaa ttcatgcttt tgccaagaac 12725140
aaattgatac aaatcacata atgctgattt tttttttaat ccctattctt 12725190
tttgaatgtg attttcccta ataaacttca tctacagcct ttctggcata 12725240
tctttataat ttggaactta aagaaattta tcttcagttg acatgaagac 12725290
aaagaaactt tatttttcct taacaataaa acctggctat aaaagtgcc 12725340
accaaaagga acacaaaagg agagttttat aattcacttt aaaaggagat 12725390
ttgatggtaa agtttaaga ttaaaatatt ttgttcttca attacagAGC 12725440
GATGACCCCA CAGTATCTGC CTCACGGTGG AAAATACCAA GTTCTTGAG 12725490
ATTACTCTTT GGCAGTGGTC TTCCCCCTGC ACTTTCTGA TCTAATTCT 12725540

GTTTTATACC TTATACCCAA AACACTTACT ACCAACACAG CTGTTAAACA 12725590
TTCTATACAA AAAAATGTGA TGATCTGGTA TTAGGAAATT ACTTTCACAG 12725640
TAAATATCAA AGAAAAAGA TTAAGGGTCT CTTTGCCATG CTTTTCATCA 12725690
TATGCACCAA ATGTAAATTT TGTACAATAA AATTTTATTT CCTAAGTAA 12725740
tttgtcttaa atgtatTTTT tttaatttca gactctctat tagcttcccta 12725790
gtttgtctct aataaatcac cacaaactta gtgacttaaa acacaccagt 12725840
ttaattTTTT cattaactaa ttaattaatt ttcattctgt atTTtaagta 12725890
aaatgagacg aggtcttgcc atgttgccca ggctggctctc aaactcctgg 12725940
gctcaggcaa tcctcctgcc atgtcctccc aaagtgctga gattacaggc 12725990
attacaccac tatgcccagc cacaaatttg cTTTTaaatt ctgacttctg 12726040
agttctagga gtcagaaatc caacagtggg tctgacgaga ctaaaaatcag 12726090
ggtgatcgca gggcactgct cctgaggaag gccttaggga gaatttgtgt 12726140
tctgctgttt ccagcttcta gaggctgcca tattatttgg ctcatgggcc 12726190
cttctatctt caaagccagc agcttagcat cttcaaactc ctcagttata 12726240
aaaggaccct gtgattgcat tgggccacc ccaataatcc aggatagttt 12726290
ccccatttta gaataatttt actataaaag aaataataaa aatagttatc 12726340
atTTtcgagt gcctgctgca tactagtcac tgttcacccc tagtctttgg 12726390
gatgtacgat ttactgtgt tacctctgtg ccttggctct ctcatctgta 12726440
acacaagggc ttgtaatatt taaggataca actacttccc agcactccgg 12726490
aaaggtttcc ttttgatatg taaatcatgc tggattctgt ggcctatttc 12726540
tgTTTccctt ttggTTaaaa tatgaaatgg gggTTgacat cagcaagatg 12726590
gcaaaatagg aagtaccagt cctcattacc ccacagagac accagTTtaa 12726640
tttatagacc aggataccag aaaccagtta agttgcagta tccccaggtg 12726690
agtGcaaaat taagaacagc cacgttgaaa tgagtaagaa gagtcattt

PSMG2 (NC_000018.9, GRCh37) - gDNA - 2025-04-03

