HOWR-2

Summary

General

fastp version:	0.20.0 (https://github.com/OpenGene/fastp)
sequencing:	paired end (150 cycles + 150 cycles)
mean length before filtering:	150bp, 150bp
mean length after filtering:	136bp, 136bp
duplication rate:	15.420298%
Insert size peak:	150

Before filtering

total reads:	299.495482 M
total bases:	44.924322 G
Q20 bases:	43.616219 G (97.088207%)
Q30 bases:	42.048130 G (93.597695%)
GC content:	48.065226%

After filtering

total reads:	283.317658 M
total bases:	38.554267 G
Q20 bases:	37.914033 G (98.339397%)
Q30 bases:	36.825779 G (95.516740%)
GC content:	49.235928%

Filtering result

reads passed filters:	283.317658 M (94.598308%)
reads with low quality:	7.017686 M (2.343169%)
reads with too many N:	20.682000 K (0.006906%)
reads too short:	6.737414 M (2.249588%)
reads with low complexity:	2.402042 M (0.802029%)

Adapters

Adapter or bad ligation of read1

Sequence	Occurrences
A	1106129
AG	1077582
AGA	1080244
AGAT	1073993
AGATC	1096792

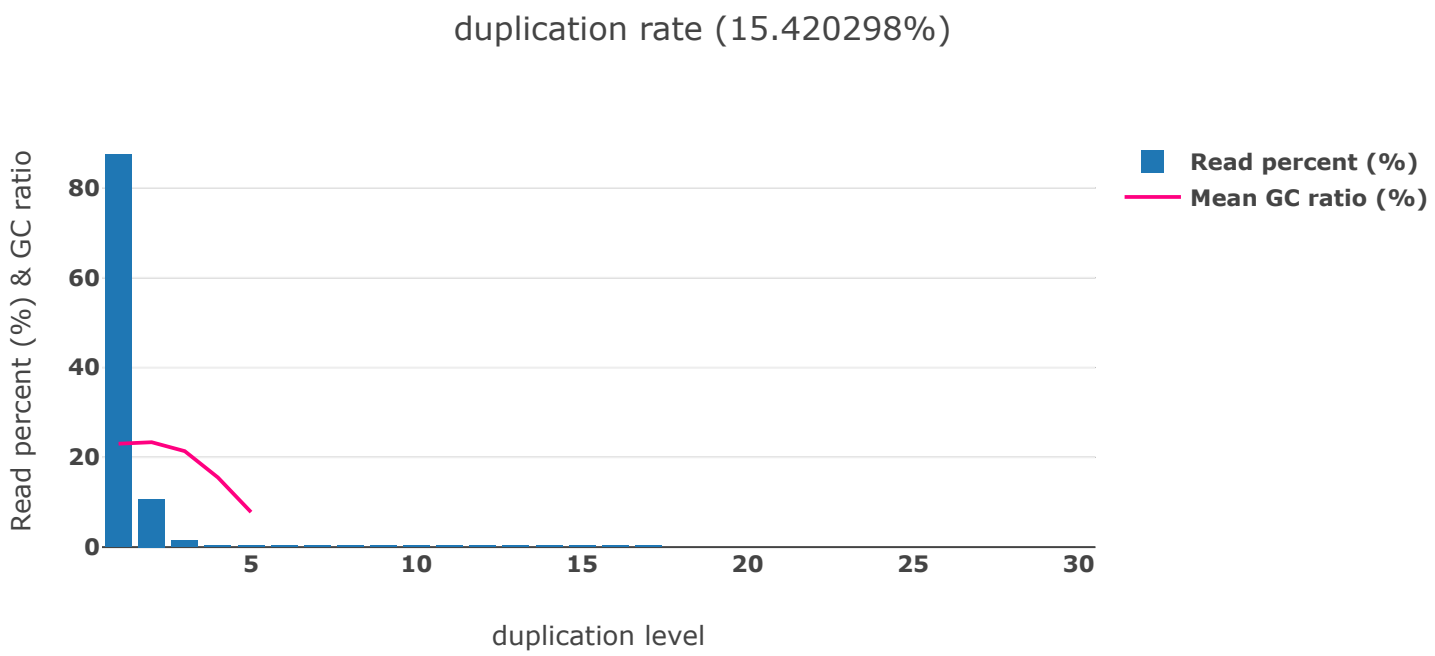
AGATCG	1145913
AGATCGG	1183489
AGATCGGA	1188867
AGATCGGAA	1162135
AGATCGGAAG	1176395
AGATCGGAAGA	1165370
AGATCGGAAGAG	1179705
AGATCGGAAGAGC	1185588
AGATCGGAAGAGCA	1188660
AGATCGGAAGAGCAC	1174681
AGATCGGAAGAGCACA	1174116
AGATCGGAAGAGCACAC	1188123
AGATCGGAAGAGCACACG	1171176
AGATCGGAAGAGCACACGT	1192603
AGATCGGAAGAGCACACGTC	1201654
AGATCGGAAGAGCACACGTCT	1215044
AGATCGGAAGAGCACACGTCTG	1198056
TTTTTTTTTTTTTTTTTTTTTT	1289177
AGATCGGAAGAGCACACGTCTGA	1203850
AGATCGGAAGAGCACACGTCTGAA	1200971
AGATCGGAAGAGCACACGTCTGAAC	1164560
AGATCGGAAGAGCACACGTCTGAACT	1140081
AGATCGGAAGAGCACACGTCTGAACTC	1138929
AGATCGGAAGAGCACACGTCTGAACTCC	1113350
AGATCGGAAGAGCACACGTCTGAACTCCA	1135666
AGATCGGAAGAGCACACGTCTGAACTCCAG	1087670
AGATCGGAAGAGCACACGTCTGAACTCCAGT	1126123
AGATCGGAAGAGCACACGTCTGAACTCCAGTC	1088134
AGATCGGAAGAGCACACGTCTGAACTCCAGTCA	1058464
AGATCGGAAGAGCACACGTCTGAACTCCAGTCAC	1031412
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACA	1001850
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACAC	989156
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACACT	943046
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTG	964513
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTGA	915138
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTGAT	897533
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTGATA	895759
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTGATAT	849050
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTGATATA	828758
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTGATATAT	804885
other adapter sequences	26094207

Adapter or bad ligation of read2

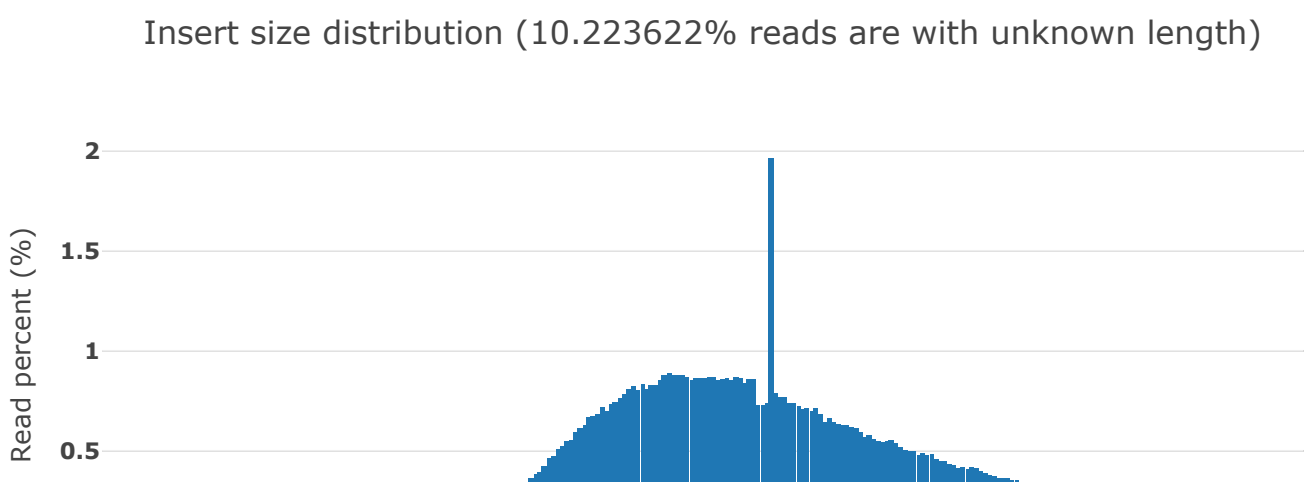
Sequence	Occurrences
A	1111630
AG	1090080
AGA	1095152
AGAT	1081895
AGATC	1121967
AGATCG	1148522
AGATCGG	1184740
AGATCGGA	1200661
AGATCGGAA	1167883
AGATCGGAAG	1186822
AGATCGGAAGA	1184049
AGATCGGAAGAG	1201507
AGATCGGAAGAGC	1219087
AGATCGGAAGAGCG	1229304
AGATCGGAAGAGCGT	1183974
AGATCGGAAGAGCGTC	1187652
AGATCGGAAGAGCGTCG	1188718
AGATCGGAAGAGCGTCGT	1151102
AGATCGGAAGAGCGTCGTG	1168720
AGATCGGAAGAGCGTCGTGT	1185966
AGATCGGAAGAGCGTCGTGTA	1184274
AGATCGGAAGAGCGTCGTGTAG	1197499
TTTTTTTTTTTTTTTTTTTTT	937060
AGATCGGAAGAGCGTCGTGTAGG	1224833
AGATCGGAAGAGCGTCGTGTAGGG	1218895
AGATCGGAAGAGCGTCGTGTAGGGA	1172765
AGATCGGAAGAGCGTCGTGTAGGGAA	1157844
AGATCGGAAGAGCGTCGTGTAGGGAAA	1158450
AGATCGGAAGAGCGTCGTGTAGGGAAAG	1114043
AGATCGGAAGAGCGTCGTGTAGGGAAAGA	1139958
AGATCGGAAGAGCGTCGTGTAGGGAAAGAG	1097369
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGT	1116309
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTG	1091695
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGT	1069920
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTA	1039909
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAG	1016312
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGA	996945
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGAT	953466
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATC	977160

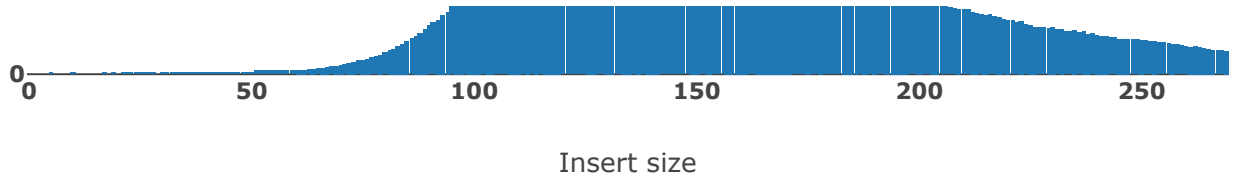
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCT	932927
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTC	920495
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCG	920871
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGG	862439
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGT	839446
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTG	816408
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGG	766150
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGT	748521
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGTCGCCGTATCATTAAAAA	1215506
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGTCGCCGTATCATTAAAAAA	1161388
other adapter sequences	20023898

Duplication



Insert size estimation



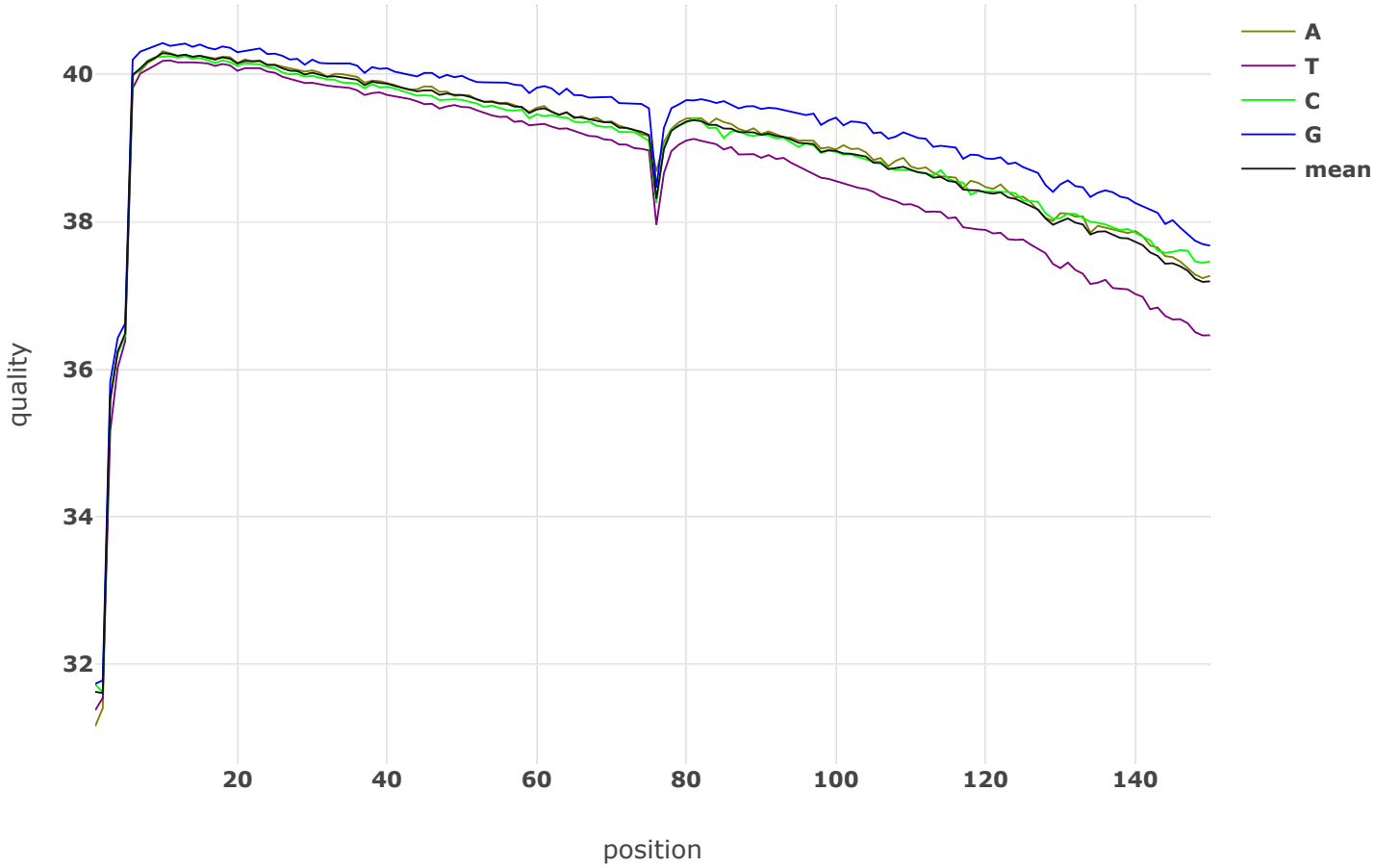


This estimation is based on paired-end overlap analysis, and there are 10.223622% reads found not overlapped.
The nonoverlapped read pairs may have insert size <30 or >270, or contain too much sequencing errors to be detected as overlapped.

Before filtering

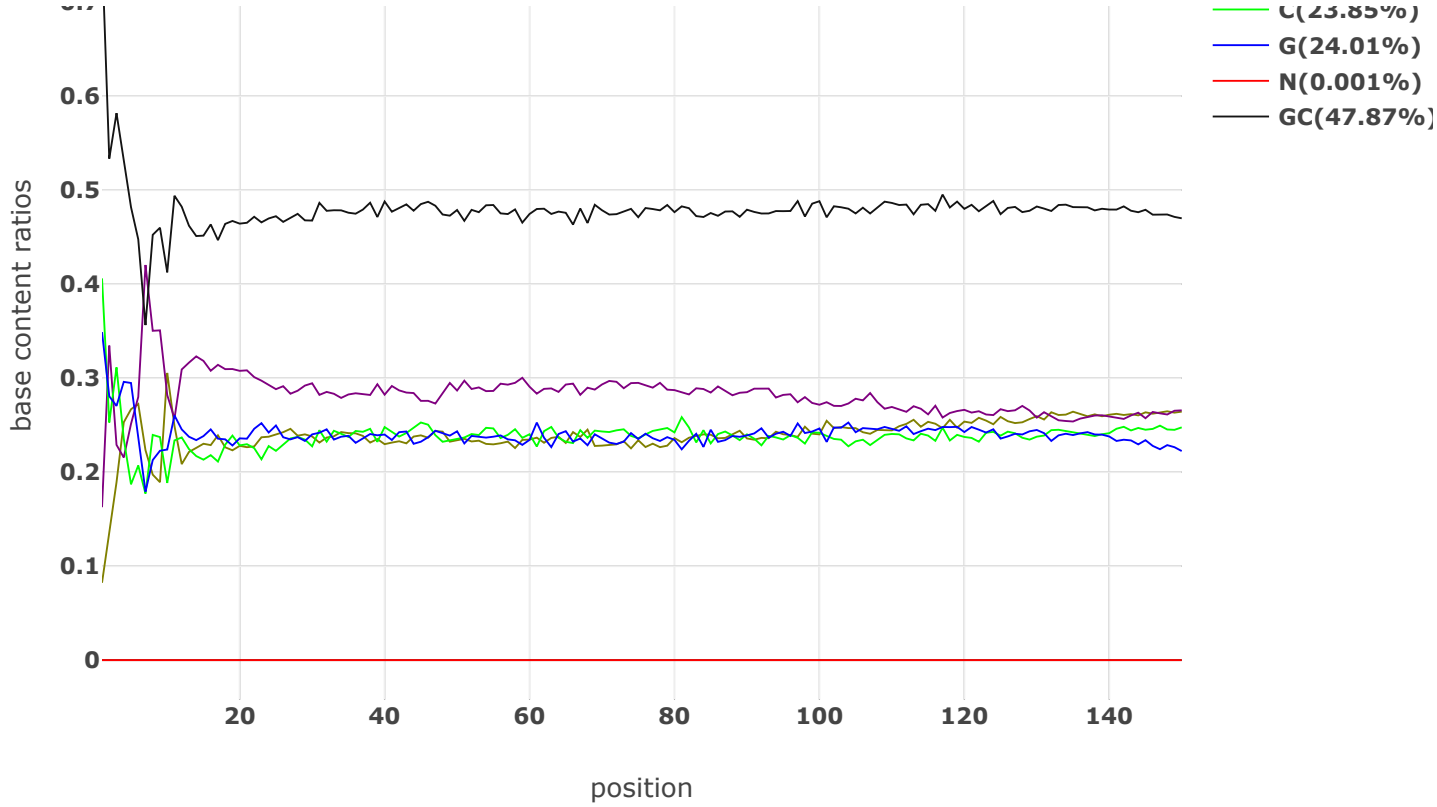
Before filtering: read1: quality

Value of each position will be shown on mouse over.



Before filtering: read1: base contents

Value of each position will be shown on mouse over.



Before filtering: read1: KMER counting

Darker background means larger counts. The count will be shown on mouse over.

	AA	AT	AC	AG	TA	TT	TC	TG	CA	CT	CC	CG	GA	GT	GC	GG
AAA	AAAAA	AAAAT	AAAAC	AAAAG	AAATA	AAATT	AAATC	AAATG	AAACA	AAACT	AAACC	AAACG	AAAGA	AAAGT	AAAGC	AAAGG
AAT	AATAA	AATAT	AATAC	AATAG	AATTA	AATTT	AATTC	AATTG	AATCA	AATCT	AATCC	AATCG	AATGA	AATGT	AATGC	AATGG
AAC	AACAA	AACAT	AACAC	AACAG	AACTA	AACTT	AACTC	AACTG	AACCA	AACCT	AACCC	AACCG	AACGA	AACGT	AACGC	AACGG
AAG	AAGAA	AAGAT	AAGAC	AAGAG	AAGTA	AAGTT	AAGTC	AAGTG	AAGCA	AAGCT	AAGCC	AAGCG	AAGGA	AAGGT	AAGGC	AAGGG
ATA	ATAAA	ATAAT	ATAAC	ATAAG	ATATA	ATATT	ATATC	ATATG	ATACA	ATACT	ATACC	ATACG	ATAGA	ATAGT	ATAGC	ATAGG
ATT	ATTAA	ATTAT	ATTAC	ATTAG	ATTTA	ATTTT	ATTTC	ATTTG	ATTCA	ATTCT	ATTCC	ATTCG	ATTGA	ATTGT	ATTGC	ATTGG
ATC	ATCAA	ATCAT	ATCAC	ATCAG	ATCTA	ATCTT	ATCTC	ATCTG	ATCCA	ATCCT	ATCCC	ATCCG	ATCGA	ATCGT	ATCGC	ATCGG
ATG	ATGAA	ATGAT	ATGAC	ATGAG	ATGTA	ATGTT	ATGTC	ATGTG	ATGCA	ATGCT	ATGCC	ATGCG	ATGGA	ATGGT	ATGGC	ATGGG
ACA	ACAAA	ACAAT	ACAAC	ACAAG	ACATA	ACATT	ACATC	ACATG	ACACA	ACACT	ACACC	ACACG	ACAGA	ACAGT	ACAGC	ACAGG
ACT	ACTAA	ACTAT	ACTAC	ACTAG	ACTTA	ACTTT	ACTTC	ACTTG	ACTCA	ACTCT	ACTCC	ACTCG	ACTGA	ACTGT	ACTGC	ACTGG
ACC	ACCAA	ACCAT	ACCAC	ACCAG	ACCTA	ACCTT	ACCTC	ACCTG	ACCCA	ACCCT	ACCCC	ACCCG	ACCGA	ACCGT	ACCGC	ACCGG
ACG	ACGAA	ACGAT	ACGAC	ACGAG	ACGTA	ACGTT	ACGTC	ACGTG	ACGCA	ACGCT	ACGCC	ACGCG	ACGGA	ACGGT	ACGGC	ACGGG
AGA	AGAAA	AGAAT	AGAAC	AGAAG	AGATA	AGATT	AGATC	AGATG	AGACA	AGACT	AGACC	AGACG	AGAGA	AGAGT	AGAGC	AGAGG
AGT	AGTAA	AGTAT	AGTAC	AGTAG	AGTTA	AGTTT	AGTTC	AGTTG	AGTCA	AGTCT	AGTCC	AGTCG	AGTGA	AGTGT	AGTGC	AGTGG
AGC	AGCAA	AGCAT	AGCAC	AGCAG	AGCTA	AGCTT	AGCTC	AGCTG	AGCCA	AGCCT	AGCCC	AGCCG	AGCGA	AGCGT	AGCGC	AGCGG
AGG	AGGAA	AGGAT	AGGAC	AGGAG	AGGTA	AGGTT	AGGTC	AGGTG	AGGCA	AGGCT	AGGCC	AGGCG	AGGGA	AGGGT	AGGGC	AGGGG
TAA	TAAAA	TAAAT	TAAAC	TAAAG	TAATA	TAATT	TAATC	TAATG	TAACA	TAACT	TAACC	TAACG	TAAGA	TAAGT	TAAGC	TAAGG
TAT	TATAA	TATAT	TATAC	TATAG	TATTA	TATTT	TATTC	TATTG	TATCA	TATCT	TATCC	TATCG	TATGA	TATGT	TATGC	TATGG
TAC	TACAA	TACAT	TACAC	TACAG	TACTA	TACTT	TACTC	TACTG	TACCA	TACCT	TACCC	TACCG	TACGA	TACGT	TACGC	TACGG
TAG	TAGAA	TAGAT	TAGAC	TAGAG	TAGTA	TAGTT	TAGTC	TAGTG	TAGCA	TAGCT	TAGCC	TAGCG	TAGGA	TAGGT	TAGGC	TAGGG
TTA	TTAAA	TTAAT	TTAAC	TTAAG	TTATA	TTATT	TTATC	TTATG	TTACA	TTACT	TTACC	TTACG	TTAGA	TTAGT	TTAGC	TTAGG
TTT	TTTAA	TTTAT	TTTAC	TTTAG	TTTTA	TTTTT	TTTTC	TTTTG	TTTCA	TTTCT	TTTCC	TTTCG	TTTGA	TTTGT	TTTGC	TTTGG
TTC	TTCAA	TTCAT	TTCAC	TTCAG	TTCTA	TTCTT	TTCTC	TTCTG	TTCCA	TTCCT	TTCCC	TTCCG	TTCGA	TTCGT	TTCGC	TTCGG
TTG	TTGAA	TTGAT	TTGAC	TTGAG	TTGTA	TTGTT	TTGTC	TTGTG	TTGCA	TTGCT	TTGCC	TTGCG	TTGGA	TTGGT	TTGGC	TTGGG
TCA	TCAAA	TCAAT	TCAAC	TCAAG	TCATA	TCATT	TCATC	TCATG	TCACA	TCACT	TCACC	TCACG	TCAGA	TCAGT	TCAGC	TCAGG
TCT	TCTAA	TCTAT	TCTAC	TCTAG	TCTTA	TCTTT	TCTTC	TCTTG	TCTCA	TCTCT	TCTCC	TCTCG	TCTGA	TCTGT	TCTGC	TCTGG
TCC	TCCAA	TCCAT	TCCAC	TCCAG	TCCTA	TCCTT	TCCTC	TCCTG	TCCCA	TCCCT	TCCCC	TCCCG	TCCGA	TCCGT	TCCGC	TCCGG
TCG	TCGAA	TCGAT	TCGAC	TCGAG	TCGTA	TCGTT	TCGTC	TCGTG	TCGCA	TCGCT	TCGCC	TCGCG	TCGGA	TCGGT	TCGGC	TCGGG
TGA	TGAAA	TGAAT	TGAAC	TGAAG	TGATA	TGATT	TGATC	TGATG	TGACA	TGACT	TGACC	TGACG	TGAGA	TGAGT	TGAGC	TGAGG
TGT	TGTAA	TGTAT	TGTAC	TGTAG	TGTTA	TGTTT	TGTTC	TGTTG	TGTCA	TGTCT	TGTCC	TGTCG	TGTGA	TGTGT	TGTGC	TGTGG
TGC	TGCAA	TGCAT	TGCAC	TGCAG	TGCTA	TGCTT	TGCTC	TGCTG	TGCCA	TGCCT	TGCCC	TGCCG	TGCGA	TGCGT	TGCGC	TGCGG
TGG	TGGAA	TGGAT	TGGAC	TGGAG	TGGTA	TGGTT	TGGTC	TGGTG	TGGCA	TGGCT	TGGCC	TGGCG	TGGGA	TGGGT	TGGGC	TGGGG
CAA	CAAAA	CAAAT	CAAAC	CAAAG	CAATA	CAATT	CAATC	CAATG	CAACA	CAACT	CAACC	CAACG	CAAGA	CAAGT	CAAGC	CAAGG
CAT	CATAA	CATAT	CATAC	CATAG	CATTA	CATTT	CATTC	CATTG	CATCA	CATCT	CATCC	CATCG	CATGA	CATGT	CATGC	CATGG
CAC	CACAA	CACAT	CACAC	CACAG	CACTA	CACTT	CACTC	CACTG	CACCA	CACCT	CACCC	CACCG	CACGA	CACGT	CACGC	CACGG
CAG	CAGAA	CAGAT	CAGAC	CAGAG	CAGTA	CAGTT	CAGTC	CAGTG	CAGCA	CAGCT	CAGCC	CAGCG	CAGGA	CAGGT	CAGGC	CAGGG
CTA	CTAAA	CTAAT	CTAAC	CTAAG	CTATA	CTATT	CTATC	CTATG	CTACA	CTACT	CTACC	CTACG	CTAGA	CTAGT	CTAGC	CTAGG
CTT	CTTAA	CTTAT	CTTAC	CTTAG	CTTTA	CTTTT	CTTTC	CTTTG	CTTCA	CTTCT	CTTCC	CTTCG	CTTGA	CTTGT	CTTGC	CTTGG
CTC	CTCAA	CTCAT	CTCAC	CTCAG	CTCTA	CTCTT	CTCTC	CTCTG	CTCCA	CTCCT	CTCCC	CTCCG	CTCGA	CTCGT	CTCGC	CTCGG
CTG	CTGAA	CTGAT	CTGAC	CTGAG	CTGTA	CTGTT	CTGTC	CTGTG	CTGCA	CTGCT	CTGCC	CTGCG	CTGGA	CTGGT	CTGGC	CTGGG
CCA	CCAAA	CCAAT	CCAAC	CCAAG	CCATA	CCATT	CCATC	CCATG	CCACA	CCACT	CCACC	CCACG	CCAGA	CCAGT	CCAGC	CCAGG
CCT	CCTAA	CCTAT	CCTAC	CCTAG	CCTTA	CCTTT	CCTTC	CCTTG	CCTCA	CCTCT	CCTCC	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	CCCTC	CCCTG	CCCCA	CCCCT	CCCCC	CCCCG	CCCGA	CCCGT	CCCGC	CCCGG
CCG	CCGAA	CCGAT	CCGAC	CCGAG	CCGTA	CCGTT	CCGTC	CCGTG	CCGCA	CCGCT	CCGCC	CCGCG	CCGGA	CCGGT	CCGGC	CCGGG
CGA	CGAAA	CGAAT	CGAAC	CGAAG	CGATA	CGATT	CGATC	CGATG	CGACA	CGACT	CGACC	CGACG	CGAGA	CGAGT	CGAGC	CGAGG
CGT	CGTAA	CGTAT	CGTAC	CGTAG	CGTTA	CGTTT	CGTTC	CGTTG	CGTCA	CGTCT	CGTCC	CGTCG	CGTGA	CGTGT	CGTGC	CGTGG
CGC	CGCAA	CGCAT	CGCAC	CGCAG	CGCTA	CGCTT	CGCTC	CGCTG	CGCCA	CGCCT	CGCCC	CGCCG	CGCGA	CGCGT	CGCGC	CGCGG
CGG	CGGAA	CGGAT	CGGAC	CGGAG	CGGTA	CGGTT	CGGTC	CGGTG	CGGCA	CGGCT	CGGCC	CGGCG	CGGGA	CGGGT	CGGGC	CGGGG
GAA	GAAAA	GAAAT	GAAAC	GAAAG	GAATA	GAATT	GAATC	GAATG	GAACA	GAACT	GAACC	GAACG	GAAGA	GAAGT	GAAGC	GAAGG
GAT	GATAA	GATAT	GATAC	GATAG	GATTA	GATTT	GATTC	GATTG	GATCA	GATCT	GATCC	GATCG	GATGA	GATGT	GATGC	GATGG
GAC	GACAA	GACAT	GACAC	GACAG	GACTA	GACTT	GACTC	GACTG	GACCA	GACCT	GACCC	GACCG	GACGA	GACGT	GACGC	GACGG
GAG	GAGAA	GAGAT	GAGAC	GAGAG	GAGTA	GAGTT	GAGTC	GAGTG	GAGCA	GAGCT	GAGCC	GAGCG	GAGGA	GAGGT	GAGGC	GAGGG

GTA	GTAAA	GTAAT	GTAAC	GTAAG	GTATA	GTATT	GTATC	GTATG	GTACA	GTACT	GTACC	GTACG	GTAGA	GTAGT	GTAGC	GTAGG
GTT	GTTAA	GTTAT	GTTAC	GTTAG	GTTTA	GTTTT	GTTTC	GTTTG	GTTCA	GTTCT	GTTCC	GTTCG	GTTGA	GTTGT	GTTGC	GTTGG
GTC	GTCAA	GTCAT	GTCAC	GTCAG	GTCTA	GTCTT	GTCTC	GTCTG	GTCCA	GTCCT	GTCCC	GTCCG	GTCGA	GTCGT	GTCGC	GTCGG
GTG	GTGAA	GTGAT	GTGAC	GTGAG	GTGTA	GTGTT	GTGTC	GTGTG	GTGCA	GTGCT	GTGCC	GTGCG	GTGGA	GTGGT	GTGGC	GTGGG
GCA	GCAAA	GCAAT	GCAAC	GCAAG	GCATA	GCATT	GCATC	GCATG	GCACA	GCACT	GCACC	GCACG	GCAGA	GCAGT	GCAGC	GCAGG
GCT	GCTAA	GCTAT	GCTAC	GCTAG	GCTTA	GCTTT	GCTTC	GCTTG	GCTCA	GCTCT	GCTCC	GCTCG	GCTGA	GCTGT	GCTGC	GCTGG
GCC	GCCAA	GCCAT	GCCAC	GCCAG	GCCTA	GCCTT	GCCTC	GCCTG	GCCCA	GCCCT	GCCCC	GCCCG	GCCGA	GCCGT	GCCGC	GCCGG
GCG	GCGAA	GCGAT	GCGAC	GCGAG	GCGTA	GCGTT	GCGTC	GCGTG	GCGCA	GCGCT	GCGCC	GCGCG	GCGGA	GCGGT	GCGGC	GCGGG
GGA	GGAAA	GGAAT	GGAAC	GGAAG	GGATA	GGATT	GGATC	GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGAGG
GGT	GGTAA	GGTAT	GGTAC	GGTAG	GGTTA	GGTTT	GGTTC	GGTTG	GGTCA	GGTCT	GGTCC	GGTCG	GGTGA	GGTGT	GGTGC	GGTGG
GGC	GGCAA	GGCAT	GGCAC	GGCAG	GGCTA	GGCTT	GGCTC	GGCTG	GGCCA	GGCCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGCGG
GGG	GGGAA	GGGAT	GGGAC	GGGAG	GGGTA	GGGTT	GGGTC	GGGTG	GGGCA	GGGCT	GGGCC	GGGCG	GGGGA	GGGGT	GGGGC	GGGGG

Before filtering: read1: overrepresented sequences

Sampling rate: 1 / 20

overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 150
AAAA

AAAAAAAAAAAAAAAAAAAAAAAAAAAA	2130 (0.018965%)	
AAAAATAAAAAAAAAAAAAAAAAAA

CTCGGGGCTGTACTCCTTACCCAGGCGGG		
ACAGGAACTTGAAGTTCACGGGGTCCACACGCAGGTTGTA	1502 (0.005349%)	
ACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCC	930 (0.008281%)	
ACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGG	931 (0.003316%)	
ACCACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGA	173 (0.000616%)	
ACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAG	147 (0.000524%)	
ACCACCTGCAAGCACTGCGACAGGAACTTGAAGTTCACGG	751 (0.002675%)	
ACCACTTTCTTGCCATGGCCACGGATCTGGTCAGAGCCTT	164 (0.000584%)	
ACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAACCAGT	1121 (0.003992%)	
ACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGT	197 (0.000702%)	
ACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCA	746 (0.002657%)	
ACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCT	772 (0.002750%)	
ACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTT	331 (0.001179%)	
ACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACG	66 (0.000588%)	
ACCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGAC	106 (0.000378%)	
ACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGG	150 (0.000534%)	
ACCTCGGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCA	109834 (0.391179%)	
ACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGT	983 (0.003501%)	
ACCTGCAAGCACTGCGACAGGAACTTGAAGTTCACGGGGT	2689 (0.009577%)	
ACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTC	203 (0.000723%)	
ACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACAGGT	83 (0.000296%)	
ACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGT	104 (0.000370%)	
ACGACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGG	209 (0.000744%)	
ACGATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCACTCGG	311 (0.001108%)	
ACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGG	317 (0.001129%)	
ACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGGGTTGCGAG	286 (0.002547%)	
ACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTGTCCAGGTTCTTGATGGCATTGCCCAGGGCAGCCA	1727 (0.015377%)	
ACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGGG	125 (0.001113%)	
ACGTCTGAACTCCAGTCACACTGATATATCTCGTATGCCG	223 (0.000794%)	
ACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCT	134 (0.001193%)	
ACGTGGTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCT	43351 (0.154397%)	
ACTCCAGTCACACTGATATATCTCGTATGCCGTCTTCTGC	161 (0.000573%)	
ACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCA	241 (0.000858%)	
ACTGACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAG	69295 (0.246797%)	

ACTGCGACAGGAACTTGAAGTTCACGGGGTCCACACGCAG	2884 (0.010271%)	
ACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGGCGTG	727 (0.002589%)	
ACTTGCGGGCCAGAGCGTGGGCAACCACACGCACCAGCTT	550 (0.001959%)	
AGAAA

AGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTCCT	265 (0.000944%)	
AGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCC	444 (0.001581%)	
AGCTTGGAGAGGGCACCAGCAATGTCATCAACGTGGTTGG	425 (0.001514%)	
AGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTTAGTG GTACTTGCGGGCCAGAGCGTGGGCAACCA	442 (0.003936%)	
AGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGG	1416 (0.005043%)	
AGGAACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGG	1890 (0.006731%)	
AGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTCCA	194 (0.000691%)	
AGGACGACGACCAGGATGTCACCCAGGAGCCTGAAGTTCT	300 (0.001068%)	
AGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGG	106 (0.000378%)	
AGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTG GGAGAAGGTGTTCTTGATGCTGTCCAGGT	324 (0.002885%)	
AGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACG GCAGAGTGCACCTCGGGGCTGTACTCCTT	194 (0.001727%)	
AGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGACAGGA	145 (0.000516%)	
AGGGCACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAA	649 (0.002311%)	
AGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGA AGGCTTCTCAGATGATGAAGATTAGCATG	71 (0.000632%)	
AGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGC TGTCCACTGCACCATGGTGCTGGCTTTGC	87 (0.000775%)	
AGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAG TGCCCACGGCACACAGGAACTTGTCCAGG	314 (0.002796%)	
AGGGGTTGCGAGTGGCCACCACCACCAGGAAGCACTGACC	243 (0.000865%)	
AGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCG	547 (0.001948%)	
AGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTT	99 (0.000353%)	
AGGTTCTTGATGGCATTGCCCAGGGCAGCCACCACTTTCT	313 (0.001115%)	
AGTATTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCA CGGCCGACATGAACTTGTCGACGGCAGAG	182 (0.001621%)	
AGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAG	1167 (0.004156%)	
AGTGGCCACCACCACCAGGAAGCACTGACCCAGCAGTTTG	85 (0.000303%)	
AGTGGGCGGCCAGGACGACGACCAGGATGTCACCCAGGAG	456 (0.001624%)	
AGTGGTACTTGCGGGCCAGAGCGTGGGCAACCACACGCAC	538 (0.001916%)	
AGTTCACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTG TCCAGGTTCTTGATGGCATTGCCCAGGGC	28 (0.000249%)	
AGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTG TCCAGGTTCTTGACGGCCTCCCCGAAGGA	207 (0.001843%)	
AGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGGGCAC	289 (0.001029%)	
ATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAA	162 (0.001442%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACACTGATAT	1617 (0.005759%)	
ATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGG CTGTACTCCTTACCCAGGCGGGTAGCCAG	2992 (0.026640%)	
ATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGC	630 (0.002244%)	
ATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAG	1414 (0.012590%)	

AGTGCACCTCGGGGCTGTACTCCTTACCC		
ATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCT	405 (0.003606%)	
ATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCT	107 (0.000953%)	
ATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGAT	30 (0.000267%)	
ATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGG	74 (0.000659%)	
ATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCACGG	234 (0.000833%)	
ATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGC	989 (0.003522%)	
ATTTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGC	4206 (0.037450%)	
CAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGTC	253 (0.000901%)	
CAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGAC	4630 (0.016490%)	
CAAGAGTATTTTTTATTGATGGTACACAGGCATGGCTGAC	4539 (0.016166%)	
CAAGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTG	54084 (0.192623%)	
CAATGTCATCAACGTGGTTGGCAGCTTCAACCAGTGCAGC	32 (0.000114%)	
CACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAG	1048 (0.003732%)	
CACACGTCTGAACTCCAGTCACACTGATATATCTCGTATG	412 (0.001467%)	
CACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTC	3975 (0.035393%)	
CACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCG	9765 (0.034778%)	
CACCACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTG	223 (0.000794%)	
CACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACA	183 (0.000652%)	
CACCACCTGCAAGCACTGCGACAGGAACTTGAAGTTCACG	295 (0.001051%)	
CACCACTTTCTTGCCATGGCCACGGATCTGGTCAGAGCCT	472 (0.001681%)	
CACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAACCAG	453 (0.001613%)	
CACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGG	474 (0.001688%)	
CACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGAC	833 (0.007417%)	
CACCTGCAAGCACTGCGACAGGAACTTGAAGTTCACGGGG	45364 (0.161566%)	
CACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTT	1491 (0.005310%)	
CACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGACG	1068 (0.003804%)	
CACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACAGG	145 (0.000516%)	
CACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAG	953 (0.003394%)	
CACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGGGTTGCGA	2308 (0.020550%)	
CACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTGTCCAGGTTCTTGATGGCATTGCCCAGGGCAGCC	5264 (0.046870%)	
CACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGG	2459 (0.021895%)	
CACGTCTGAACTCCAGTCACACTGATATATCTCGTATGCC	230 (0.000819%)	
CACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGA	671 (0.005974%)	

CGGCCTCCCCGAAGGAGGTGAGCACCTTC		
CACTGACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCA	354 (0.001261%)	
CACTGCGACAGGAACTTGAAGTTCACGGGGTCCACACGCA	2067 (0.007362%)	
CAGAGAGGGGTTGCGAGTGGCCACCACCACCAGGAAGCAC	575 (0.002048%)	
CAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCTT	482 (0.001717%)	
CAGAGCGTGGGCAACCACACGCACCAGCTTCTGCCAGGCA	2189 (0.007796%)	
CAGAGCGTGGGCAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGTCGGGAGTGAAGTCCTTGCCGA AGTGGGCGGCCAGGACGACGACCAGGATG	671 (0.005974%)	
CAGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTGA	409 (0.001457%)	
CAGCAATGTCATCAACGTGGTTGGCAGCTTCAACCAGTGC	739 (0.002632%)	
CAGCACCACCTGCAAGCACTGCGACAGGAACTTGAAGTTC	337 (0.001200%)	
CAGCAGAGAGGGGTTGCGAGTGGCCACCACCACCAGGAAG	125500 (0.446974%)	
CAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTTGG	1232 (0.004388%)	
CAGCCACCACTTTCTTGCCATGGCCACGGATCTGGTCAGA	131 (0.000467%)	
CAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGC TTCTCAGATGATGAAGATTAGCATGATTA	145 (0.001291%)	
CAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACC TCGGGGCTGTACTCCTTACCCAGGCGGGT	862 (0.007675%)	
CAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTT GTCCAGGGAAGCGTGGACCTCTGGGGTCA	1202 (0.010702%)	
CAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGA	1339 (0.004769%)	
CAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACC	67 (0.000239%)	
CAGGAACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAG	3915 (0.013943%)	
CAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTCC	473 (0.001685%)	
CAGGACGACGACCAGGATGTCACCCAGGAGCCTGAAGTTC	384 (0.001368%)	
CAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCT GGGAGAAGGTGTTCTTGATGCTGTCCAGG	2594 (0.023097%)	
CAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGAC GGCAGAGTGCACCTCGGGGCTGTACTCCT	1833 (0.016321%)	
CAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGACAGG	568 (0.002023%)	
CAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGG CTGTCCACTGCACCATGGTGCTGGCTTTG	190 (0.001692%)	
CAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGC	2232 (0.007949%)	
CAGGTTCTTGATGGCATTGCCCAGGGCAGCCACCACTTTC	1735 (0.006179%)	
CAGTCACACTGATATATCTCGTATGCCGTCTTCTGCTTGA	132 (0.000470%)	
CAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAG GGGTTGCGAGTGGCCACCACCACCAGGAA	507 (0.004514%)	
CAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGA	591 (0.002105%)	
CAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTTGGGCG	474 (0.001688%)	
CAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGGGCA	269 (0.000958%)	
CATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGG GCTGTACTCCTTACCCAGGCGGGTAGCCA	481 (0.004283%)	
CATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCA	608 (0.005414%)	

GAGTGCACCTCGGGGCTGTACTCCTTACC		
CATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCACG	219 (0.000780%)	
CCACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGA	1142 (0.004067%)	
CCACCACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTT	192 (0.000684%)	
CCACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGAC	270 (0.000962%)	
CCACCACTTTCTTGCCATGGCCACGGATCTGGTCAGAGCC	309 (0.001101%)	
CCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGG	221 (0.000787%)	
CCACCTGCAAGCACTGCGACAGGAACTTGAAGTTCACGGG	927 (0.003302%)	
CCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTT	1692 (0.006026%)	
CCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTG ACGGCCTCCCCGAAGGAGGTGAGCACCTT	1395 (0.012421%)	
CCAGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTG	85642 (0.305018%)	
CCAGCAATGTCATCAACGTGGTTGGCAGCTTCAACCAGTG	756 (0.002693%)	
CCAGCACCACCTGCAAGCACTGCGACAGGAACTTGAAGTT	611 (0.002176%)	
CCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTTG	582 (0.002073%)	
CCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACT TGTCCAGGGAAGCGTGGACCTCTGGGGTC	3187 (0.028377%)	
CCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTC	1439 (0.005125%)	
CCAGGACGACGACCAGGATGTCACCCAGGAGCCTGAAGTT	446 (0.001588%)	
CCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGC TGGGAGAAGGTGTTCTTGATGCTGTCCAG	45432 (0.404520%)	
CCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGACAG	265 (0.000944%)	
CCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCG GCTGTCCACTGCACCATGGTGCTGGCTTT	186 (0.001656%)	
CCAGGTTCTTGATGGCATTGCCCAGGGCAGCCACCACTTT	6639 (0.023645%)	
CCAGTCACACTGATATATCTCGTATGCCGTCTTCTGCTTG	134 (0.000477%)	
CCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTG	1313 (0.004676%)	
CCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTT	709 (0.002525%)	
CCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGACA	278 (0.000990%)	
CCCCGAAGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCAC	225 (0.000801%)	
CCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGG	1183 (0.004213%)	
CCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCTTGGTCT	2013 (0.007169%)	
CCGAAGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCT	17206 (0.061280%)	
CCGAAGTGGGCGGCCAGGACGACGACCAGGATGTCACCCA	529 (0.001884%)	
CCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGA	1895 (0.006749%)	
CCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTC TCAGATGATGAAGATTAGCATGATTACGG	218 (0.001941%)	
CCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGG	2286 (0.008142%)	
CCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTC	252 (0.002244%)	

CACTGCACCATGGTGCTGGCTTTGCTGGG		
CCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGCCTTGAC	68064 (0.242413%)	
CCTCGGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCAC	2660 (0.009474%)	
CCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCG	1045 (0.009305%)	
CCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTA	1381 (0.004918%)	
CCTGGCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTCCACTGCACCATGGTGCTG	171 (0.001523%)	
CCTTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTG	636 (0.002265%)	
CCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCACAC	2603 (0.009271%)	
CCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCC	927 (0.003302%)	
CCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGG	9042 (0.032203%)	
CCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACAGGTT	292 (0.001040%)	
CCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCC	34686 (0.308839%)	
CGAAGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTT	160 (0.000570%)	
CGAAGTGGGCGGCCAGGACGACGACCAGGATGTCACCCAG	218 (0.000776%)	
CGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCA	161 (0.001434%)	
CGACAGGAACTTGAAGTTCACGGGGTCCACACGCAGGTTG	1962 (0.006988%)	
CGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTC	680 (0.002422%)	
CGACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGG	715 (0.002547%)	
CGAGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTG	49461 (0.176158%)	
CGAGTGGCCACCACCACCAGGAAGCACTGACCCAGCAGTT	1244 (0.004431%)	
CGATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCACTCGGC	1129 (0.004021%)	
CGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGGG	1930 (0.006874%)	
CGCTGGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGGGT	4761 (0.016957%)	
CGCTGTCGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGA	98494 (0.350791%)	
CGGAAGAGCACACGTCTGAACTCCAGTCACACTGATATAT	698 (0.002486%)	
CGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCC	19759 (0.175931%)	
CGGCCAGGACGACGACCAGGATGTCACCCAGGAGCCTGAA	337 (0.001200%)	
CGGGCCAGAGCGTGGGCAACCACACGCACCAGCTTCTGCC	1431 (0.005097%)	
CGGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCAC	8401 (0.029921%)	
CGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAGGTGAG	3014 (0.026836%)	
CGGGTAGCCAGCACCACCTGCAAGCACTGCGACAGGAACT	1475 (0.005253%)	
CGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGGGT	377 (0.003357%)	
CGTCTGAACTCCAGTCACACTGATATATCTCGTATGCCGT	166 (0.000591%)	
CGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAA	2285 (0.008138%)	

CGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACG GCCTCCCCGAAGGAGGTGAGCACCTTCTT	648 (0.005770%)	
CGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCT CAGATGATGAAGATTAGCATGATTACGGC	667 (0.005939%)	
CGTGGCGCTGGACAGGTTCCCGAAGTTGGCGAAGAACCTC	27126 (0.096610%)	
CGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGC	50539 (0.179997%)	
CGTGGTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTT	237 (0.000844%)	
CTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCG GGGCTGTACTCCTTACCCAGGCGGGTAGC	3346 (0.029792%)	
CTCCAGTCACACTGATATATCTCGTATGCCGTCTTCTGCT	75 (0.000267%)	
CTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCAC	1580 (0.005627%)	
CTCCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCAC	142857 (0.508792%)	
CTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTCC ACTGCACCATGGTGCTGGCTTTGCTGGGC	432 (0.003846%)	
CTCGGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACC	8629 (0.030733%)	
CTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCA GGTTCTTGACGGCCTCCCCGAAGGAGGTG	5868 (0.052248%)	
CTGAACTCCAGTCACACTGATATATCTCGTATGCCGTCTT	187 (0.000666%)	
CTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGAT GCTGTCCAGGTTCTTGACGGCCTCCCCGA	5562 (0.049523%)	
CTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTG CACCTCGGGGCTGTACTCCTTACCCAGGC	933 (0.008307%)	
CTGACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGT	1339 (0.004769%)	
CTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAG	2344 (0.008348%)	
CTGAGCTTGGAGAGGGCACCAGCAATGTCATCAACGTGGT	7188 (0.025600%)	
CTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCC	778 (0.002771%)	
CTGCGACAGGAACTTGAAGTTCACGGGGTCCACACGCAGG	2381 (0.008480%)	
CTGGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGGGTCC	26105 (0.092974%)	
CTGGCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTC CTCGGCTGTCCACTGCACCATGGTGCTGG	600 (0.005342%)	
CTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCC CACGGCACACAGGAACTTGTCCAGGGAAG	17466 (0.155515%)	
CTGTACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCA	2550 (0.009082%)	
CTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTCCTGT	298 (0.001061%)	
CTTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGC	1140 (0.004060%)	
CTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCACACG	2894 (0.010307%)	
CTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTT	1058 (0.003768%)	
CTTCACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGC	7333 (0.026117%)	
CTTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGA GATGCTTTGCGTTTTGATGCGAAGGCTTC	549 (0.004888%)	
CTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCT	671 (0.002390%)	
CTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATG	1160 (0.004131%)	
CTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGGCGTGC	966 (0.003440%)	

CTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGG	2758 (0.009823%)	
CTTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTGCCG	630 (0.002244%)	
CTTGATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCA	662 (0.002358%)	
CTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGA	2390 (0.008512%)	
CTTGCCGAAGTGGGCGGCCAGGACGACGACCAGGATGTCA	125492 (0.446945%)	
CTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGG	2122 (0.007558%)	
CTTGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCC	1484 (0.005285%)	
CTTGCGGGCCAGAGCGTGGGCAACCACACGCACCAGCTTC	4682 (0.016675%)	
CTTGGAGAGGGCACCAGCAATGTCATCAACGTGGTTGGCA	1087 (0.003871%)	
CTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCA GAGAGGGGTTGCGAGTGGCCACCACCACC	16867 (0.150181%)	
CTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACAGGTTC	1967 (0.007006%)	
CTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCG	10369 (0.036930%)	
CTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGT CGGCGCCATATTCCTCGGCCTGGCCGCCG	1049 (0.009340%)	
CTTTTTTTTT	273570 (0.243583%)	
GAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAA	6945 (0.061837%)	
GAACTCCAGTCACACTGATATATCTCGTATGCCGTCTTCT	152 (0.000541%)	
GAACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGGCG	369 (0.001314%)	
GAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAG AAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGA	903 (0.008040%)	
GAAGAGCACACGTCTGAACTCCAGTCACACTGATATATCG	13 (0.000046%)	
GAAGAGCACACGTCTGAACTCCAGTCACACTGATATATCT	813 (0.002896%)	
GAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTCCACA	336 (0.001197%)	
GAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTC	218 (0.000776%)	
GAAGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTG	117 (0.000417%)	
GAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCT GGCCGCCGATTTTGCTGAAAGCGGCCTTG	231 (0.002057%)	
GAAGTGGGCGGCCAGGACGACGACCAGGATGTCACCCAGG	137 (0.000488%)	
GAAGTTCACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGT TGTCCAGGTTCTTGATGGCATTGCCCAGG	29699 (0.264436%)	
GAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGC TGTCCAGGTTCTTGACGGCCTCCCCGAAG	356 (0.003170%)	
GAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTT TTGATGCGAAGGCTTCTCAGATGATGAAG	521 (0.004639%)	
GAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATG CTTTGCGTTTTGATGCGAAGGCTTCTCAG	30 (0.000267%)	
GACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCA CCTCGGGGCTGTACTCCTTACCCAGGCGG	496 (0.004416%)	
GACAGGAACTTGAAGTTCACGGGGTCCACACGCAGGTTGT	1869 (0.006657%)	
GACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCC	644 (0.002294%)	
GACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTT	564 (0.002009%)	

GACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTG	578 (0.002059%)	
GACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAG	1415 (0.005040%)	
GACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGG	288 (0.001026%)	
GACGACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCG	210 (0.000748%)	
GACGATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCACTCG	1360 (0.004844%)	
GAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAA	517 (0.004603%)	
GAGAGGGCACCAGCAATGTCATCAACGTGGTTGGCAGCTT	400 (0.001425%)	
GAGAGGGGTTGCGAGTGGCCACCACCACCAGGAAGCACTG	424 (0.001510%)	
GAGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTGA	344 (0.001225%)	
GAGCACACGTCTGAACTCCAGTCACACTGATATATCTCGT	253 (0.000901%)	
GAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCG	739 (0.002632%)	
GAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGT	635 (0.002262%)	
GAGCGTGGGCAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGTCGGGAGTGAAGTCCTTGCCGAAGTGGGCGGCCAGGACGACGACCAGGATGTC	84 (0.000748%)	
GAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACC	984 (0.008761%)	
GAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCG	3360 (0.011967%)	
GAGGGCACCAGCAATGTCATCAACGTGGTTGGCAGCTTCA	1187 (0.004228%)	
GAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAGCAT	163 (0.001451%)	
GAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAG	2333 (0.020773%)	
GAGGGGTTGCGAGTGGCCACCACCACCAGGAAGCACTGAC	876 (0.003120%)	
GAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGT	101 (0.000360%)	
GAGTATTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGA	828 (0.007372%)	
GAGTGGCCACCACCACCAGGAAGCACTGACCCAGCAGTTT	116 (0.000413%)	
GATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCACTCGGCC	179 (0.000638%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACACTGATA	9209 (0.032798%)	
GATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCATGG	438 (0.001560%)	
GATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGC	805 (0.007168%)	
GATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTC	140 (0.001247%)	
GCAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGT	6052 (0.021554%)	
GCAAGAGTATTTTTTATTGATGGTACACAGGCATGGCTGA	18616 (0.066302%)	
GCAATGTCATCAACGTGGTTGGCAGCTTCAACCAGTGCAG	336 (0.001197%)	
GCACACGTCTGAACTCCAGTCACACTGATATATCTCGTAT	325 (0.001158%)	
GCACCACCTGCAAGCACTGCGACAGGAACTTGAAGTTCAC	530 (0.001888%)	
GCACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAACCA	822 (0.002928%)	

GCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGAC	2895 (0.010311%)	
GCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACAG	779 (0.002774%)	
GCACTGACCCAGCAGTTTGAAGTTGACAGGGTCCACACGC	497 (0.001770%)	
GCACTGCGACAGGAACTTGAAGTTCACGGGGTCCACACGC	3544 (0.012622%)	
GCAGAGAGGGGTTGCGAGTGGCCACCACCACCAGGAAGCA	1757 (0.006258%)	
GCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCT	1342 (0.004780%)	
GCAGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTG	55850 (0.198912%)	
GCAGCCACCACTTTCTTGCCATGGCCACGGATCTGGTCAG	457 (0.001628%)	
GCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGG CTTCTCAGATGATGAAGATTAGCATGATT	179 (0.001594%)	
GCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAG	1076 (0.003832%)	
GCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGAC	640 (0.002279%)	
GCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGA GGGGTTGCGAGTGGCCACCACCACCAGGA	3933 (0.035019%)	
GCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTTGGGC	7270 (0.025892%)	
GCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGGGC	1135 (0.004042%)	
GCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGC AGAGTGCACCTCGGGGCTGTACTCCTTAC	763 (0.006794%)	
GCATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCAC	981 (0.003494%)	
GCCACCACCACCAGGAAGCACTGACCCAGCAGTTTGAAGT	926 (0.003298%)	
GCCACCACTTTCTTGCCATGGCCACGGATCTGGTCAGAGC	182 (0.000648%)	
GCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCT	1741 (0.006201%)	
GCCAGAGCGTGGGCAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGTCGGGAGTGAAGTCCTTGCC GAAGTGGGCGGCCAGGACGACGACCAGGA	61647 (0.548896%)	
GCCAGCACCACCTGCAAGCACTGCGACAGGAACTTGAAGT	2190 (0.007800%)	
GCCAGGACGACGACCAGGATGTCACCCAGGAGCCTGAAGT	1841 (0.006557%)	
GCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTC GGCTGTCCACTGCACCATGGTGCTGGCTT	391 (0.003481%)	
GCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCTTGGTC	8062 (0.028713%)	
GCCGAAGTGGGCGGCCAGGACGACGACCAGGATGTCACCC	1949 (0.006941%)	
GCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCG	30475 (0.108538%)	
GCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTT CTCAGATGATGAAGATTAGCATGATTACG	265 (0.002360%)	
GCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTG	2578 (0.009182%)	
GCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGT CCACTGCACCATGGTGCTGGCTTTGCTGG	379 (0.003375%)	
GCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTG ATGCTGTCCAGGTTCTTGACGGCCTCCCC	8008 (0.071302%)	
GCCTGGCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTC TCCTCGGCTGTCCACTGCACCATGGTGCT	24098 (0.214565%)	
GCGACAGGAACTTGAAGTTCACGGGGTCCACACGCAGGTT	3541 (0.012611%)	
GCGAGTGGCCACCACCACCAGGAAGCACTGACCCAGCAGT	704 (0.002507%)	

GCGCTGGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGGG	1547 (0.005510%)	
GCGGCCAGGACGACGACCAGGATGTCACCCAGGAGCCTGA	1218 (0.004338%)	
GCGGGCCAGAGCGTGGGCAACCACACGCACCAGCTTCTGC	2563 (0.009128%)	
GCGGGTAGCCAGCACCACCTGCAAGCACTGCGACAGGAAC	1659 (0.005909%)	
GCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACCCAGGCGGGTAG	1702 (0.015154%)	
GCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACCCAGG	968 (0.008619%)	
GCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGC	918 (0.003269%)	
GCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAA	3459 (0.030798%)	
GCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGC	2087 (0.007433%)	
GCTGTCGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGAC	2383 (0.008487%)	
GCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTCCTG	297 (0.001058%)	
GCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCT	1269 (0.004520%)	
GCTTCACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGG	6699 (0.023859%)	
GCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGG	1351 (0.004812%)	
GCTTGGAGAGGGCACCAGCAATGTCATCAACGTGGTTGGC	1245 (0.004434%)	
GCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGC	7069 (0.025177%)	
GGAACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGGC	1442 (0.005136%)	
GGAAGAGCACACGTCTGAACTCCAGTCACACTGATATATC	891 (0.003173%)	
GGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTCCAC	579 (0.002062%)	
GGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGCCTT	1114 (0.009919%)	
GGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAA	1393 (0.012403%)	
GGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGGGTCCAG	4645 (0.016543%)	
GGACGACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTC	548 (0.001952%)	
GGAGAGGGCACCAGCAATGTCATCAACGTGGTTGGCAGCT	11186 (0.039839%)	
GGAGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTG	68254 (0.243090%)	
GGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAGCA	426 (0.003793%)	
GGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCA	9662 (0.086029%)	
GGAGGTCACTGAGCTTGGAGAGGGCACCAGCAATGTCATC	3293 (0.011728%)	
GGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGG	162 (0.000577%)	
GGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTT	1453 (0.012937%)	
GGCACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAACC	2091 (0.007447%)	
GGCAGCCACCACTTTCTTGCCATGGCCACGGATCTGGTCA	4352 (0.015500%)	
GGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAG	374 (0.003330%)	

GCTTCTCAGATGATGAAGATTAGCATGAT		
GGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGA	6757 (0.024065%)	
GGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGGGTTGCGAGTGGCCACCACCACCAGG	7492 (0.066708%)	
GGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTA	1079 (0.009607%)	
GGCATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCA	1000 (0.003562%)	
GGCCACCACCACCAGGAAGCACTGACCCAGCAGTTTGAAG	373 (0.001328%)	
GGCCAGAGCGTGGGCAACCACACGCACCAGCTTCTGCCAG	599 (0.002133%)	
GGCCAGGACGACGACCAGGATGTCACCCAGGAGCCTGAAG	400 (0.001425%)	
GGCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTCCACTGCACCATGGTGCTGGCT	121 (0.001077%)	
GGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTCCACTGCACCATGGTGCTGGCTTTGCTG	353 (0.003143%)	
GGCGCTGGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGG	3951 (0.014072%)	
GGCGGCCAGGACGACGACCAGGATGTCACCCAGGAGCCTG	980 (0.003490%)	
GGCGGGTAGCCAGCACCACCTGCAAGCACTGCGACAGGAA	1398 (0.004979%)	
GGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACCCAG	899 (0.008005%)	
GGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGA	14783 (0.131626%)	
GGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCACCTG	4342 (0.015464%)	
GGCTTCACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGG	59220 (0.210915%)	
GGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTG	2171 (0.007732%)	
GGGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGCCT	3222 (0.028688%)	
GGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAGC	1753 (0.015608%)	
GGGCACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAAC	1221 (0.004349%)	
GGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAGCATGA	745 (0.006633%)	
GGGCCAGAGCGTGGGCAACCACACGCACCAGCTTCTGCCA	449 (0.001599%)	
GGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTCCACTGCACCATGGTGCTGGCTTTGCT	206 (0.001834%)	
GGGCGGCCAGGACGACGACCAGGATGTCACCCAGGAGCCT	528 (0.001880%)	
GGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGG	9403 (0.083723%)	
GGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCACCT	4388 (0.015628%)	
GGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCT	3676 (0.013092%)	
GGGGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGCC	3975 (0.035393%)	
GGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAG	4071 (0.036248%)	
GGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCACC	1249 (0.004448%)	
GGGGGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGC	18574 (0.165380%)	
GGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAGGTGAGC	3477 (0.030959%)	
GGGGTTGCCGACGATGGCCGTGGCGCTGGACAGGTTCCCG	8219 (0.029272%)	

GGGGTTGCGAGTGGCCACCACCACCAGGAAGCACTGACCC	6162 (0.021946%)	
GGGTAGCCAGCACCACCTGCAAGCACTGCGACAGGAACTT	548 (0.001952%)	
GGGTCCACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCT	23093 (0.082247%)	
GGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTT CTTGACGGCCTCCCCGAAGGAGGTGAGCA	896 (0.007978%)	
GGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGG AACTTGTCCAGGGAAGCGTGGACCTCTGG	1158 (0.010311%)	
GGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCT TAGTGGTACTTGCGGGCCAGAGCGTGGGC	18720 (0.166680%)	
GGGTTGCCGACGATGGCCGTGGCGCTGGACAGGTTCCCGA	960 (0.003419%)	
GGGTTGCGAGTGGCCACCACCACCAGGAAGCACTGACCCA	459 (0.001635%)	
GGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTT GTCGACGGCAGAGTGCACCTCGGGGCTGT	1445 (0.012866%)	
GGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCG TGGACCTCTGGGGTCAGCAGAGAGGGGTT	117 (0.001042%)	
GGTACTTGCGGGCCAGAGCGTGGGCAACCACACGCACCAG	4886 (0.017402%)	
GGTAGCCAGCACCACCTGCAAGCACTGCGACAGGAACTTG	196 (0.000698%)	
GGTCCACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTT	599 (0.002133%)	
GGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTC TTGACGGCCTCCCCGAAGGAGGTGAGCAC	1140 (0.010150%)	
GGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGA ACTTGTCCAGGGAAGCGTGGACCTCTGGG	379 (0.003375%)	
GGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTG	274 (0.000976%)	
GGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTT AGTGGTACTTGCGGGCCAGAGCGTGGGCA	304 (0.002707%)	
GGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCA CGGCACACAGGAACTTGTCCAGGGAAGCG	903 (0.008040%)	
GGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGG CACACAGGAACTTGTCCAGGGAAGCGTGG	3462 (0.030825%)	
GGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGA	165 (0.000588%)	
GGTTCTTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGG CTGAGATGCTTTGCGTTTTGATGCGAAGG	13975 (0.124431%)	
GGTTCTTGATGGCATTGCCCAGGGCAGCCACCACTTTCTT	1583 (0.005638%)	
GGTTGCGAGTGGCCACCACCACCAGGAAGCACTGACCCAG	1047 (0.003729%)	
GGTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCC	78 (0.000278%)	
GTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTG TCGACGGCAGAGTGCACCTCGGGGCTGTA	2182 (0.019428%)	
GTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGT GGACCTCTGGGGTCAGCAGAGAGGGGTTG	134 (0.001193%)	
GTACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCAAG	2836 (0.010101%)	
GTACTTGCGGGCCAGAGCGTGGGCAACCACACGCACCAGC	5469 (0.019478%)	
GTAGACGATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCAC	88212 (0.314171%)	
GTAGCCAGCACCACCTGCAAGCACTGCGACAGGAACTTGA	424 (0.001510%)	
GTATTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCAC GGCCGACATGAACTTGTCGACGGCAGAGT	900 (0.008013%)	
GTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGA AGGTGTTCTTGATGCTGTCCAGGTTCTTG	1228 (0.010934%)	
GTCCACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTG	1297 (0.004619%)	

GTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAGGTGAGCACC	1956 (0.017416%)	
GTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGG	5354 (0.047671%)	
GTCGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGT	90831 (0.808747%)	
GTCTGAACTCCAGTCACACTGATATATCTCGTATGCCGTC	146 (0.000520%)	
GTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAG	1929 (0.006870%)	
GTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGC	602 (0.002144%)	
GTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGG	14415 (0.051340%)	
GTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAA	1792 (0.015956%)	
GTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGC	1861 (0.006628%)	
GTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATG	565 (0.005031%)	
GTGGAGGTCACTGAGCTTGGAGAGGGCACCAGCAATGTCA	34653 (0.123418%)	
GTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAGCATGATTACGGCT	496 (0.004416%)	
GTGGCCACCACCACCAGGAAGCACTGACCCAGCAGTTTGA	421 (0.001499%)	
GTGGCGCTGGACAGGTTCCCGAAGTTGGCGAAGAACCTCT	2078 (0.007401%)	
GTGGGCGGCCAGGACGACGACCAGGATGTCACCCAGGAGC	529 (0.001884%)	
GTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCG	5388 (0.019190%)	
GTGGTACTTGCGGGCCAGAGCGTGGGCAACCACACGCACC	7239 (0.025782%)	
GTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGT	3771 (0.033576%)	
GTGGTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTG	220 (0.000784%)	
GTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGA	75 (0.000668%)	
GTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGA	1262 (0.011237%)	
GTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACC	2697 (0.024014%)	
GTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGAC	1262 (0.004495%)	
GTTCACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTGTCCAGGTTCTTGATGGCATTGCCCAGGGCA	153 (0.001362%)	
GTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAG	351 (0.003125%)	
GTTCTTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGC	222 (0.001977%)	
GTTCTTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTG	97964 (0.348903%)	
GTTCTTGATGGCATTGCCCAGGGCAGCCACCACTTTCTTG	1090 (0.003882%)	
GTTGCGAGTGGCCACCACCACCAGGAAGCACTGACCCAGC	6029 (0.021473%)	
GTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCG	135 (0.000481%)	
GTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTC	11148 (0.099260%)	
GTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGGGCACC	590 (0.002101%)	

TAAA

TCTGAACTCCAGTCACACTGATATATCTCGTATGCCGTCT	224 (0.000798%)	
TCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGC	463 (0.004122%)	
TCTTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTT	70 (0.000623%)	
TCTTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTGCC	329 (0.001172%)	
TCTTGATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCC	627 (0.002233%)	
TCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAG	377 (0.001343%)	
TCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGC	479 (0.001706%)	
TGAACTCCAGTCACACTGATATATCTCGTATGCCGTCTTC	153 (0.000545%)	
TGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAA	1156 (0.010293%)	
TGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACCCAGGCG	714 (0.006357%)	
TGACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTT	1701 (0.006058%)	
TGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGT	1536 (0.005471%)	
TGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAA	649 (0.002311%)	
TGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTGCCGTG	217 (0.000773%)	
TGAGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTG	79156 (0.281918%)	
TGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCC	476 (0.001695%)	
TGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGG	1407 (0.005011%)	
TGAGCTTGGAGAGGGCACCAGCAATGTCATCAACGTGGTT	601 (0.002140%)	
TGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGC	1311 (0.004669%)	
TGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAAC	234 (0.002084%)	
TGATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCATG	349 (0.001243%)	
TGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGG	1199 (0.010676%)	
TGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACA	1202 (0.004281%)	
TGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCA	970 (0.003455%)	
TGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCC	589 (0.002098%)	
TGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCACGGAT	142 (0.000506%)	
TGCCGAAGTGGGCGGCCAGGACGACGACCAGGATGTCACC	588 (0.002094%)	
TGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTC	1145 (0.004078%)	
TGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGT	324 (0.001154%)	
TGCGACAGGAACTTGAAGTTCACGGGGTCCACACGCAGGT	2734 (0.009737%)	
TGCGAGTGGCCACCACCACCAGGAAGCACTGACCCAGCAG	1644 (0.005855%)	
TGCGGGCCAGAGCGTGGGCAACCACACGCACCAGCTTCTG	2027 (0.007219%)	
TGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGA	22 (0.000196%)	

TGGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGGGTCCA	5622 (0.020023%)	
TGGAGAGGGCACCAGCAATGTCATCAACGTGGTTGGCAGC	202 (0.000719%)	
TGGAGGTCACTGAGCTTGGAGAGGGCACCAGCAATGTCAT	7891 (0.028104%)	
TGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCA GATGATGAAGATTAGCATGATTACGGCTG	103 (0.000917%)	
TGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTG	50 (0.000178%)	
TGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGA GAGGGGTTGCGAGTGGCCACCACCACCAG	2718 (0.024201%)	
TGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCC	1422 (0.005065%)	
TGGCCACCACCACCAGGAAGCACTGACCCAGCAGTTTGAA	138 (0.000491%)	
TGGCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCC TCGGCTGTCCACTGCACCATGGTGCTGGC	62 (0.000552%)	
TGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGA GTGCACCTCGGGGCTGTACTCCTTACCCA	456 (0.004060%)	
TGGGCGGCCAGGACGACGACCAGGATGTCACCCAGGAGCC	575 (0.002048%)	
TGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGC	3027 (0.010781%)	
TGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAG GAACTTGTCCAGGGAAGCGTGGACCTCTG	1498 (0.013338%)	
TGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACT TGTCGACGGCAGAGTGCACCTCGGGGCTG	1150 (0.010239%)	
TGGTACTTGCGGGCCAGAGCGTGGGCAACCACACGCACCA	1432 (0.005100%)	
TGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCC ACGGCACACAGGAACTTGTCCAGGGAAGC	5447 (0.048499%)	
TGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACG GCACACAGGAACTTGTCCAGGGAAGCGTG	682 (0.006072%)	
TGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGG	175 (0.000623%)	
TGGTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGC	73 (0.000260%)	
TGTACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCAA	1314 (0.004680%)	
TGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAG AAGGTGTTCTTGATGCTGTCCAGGTTCTT	351 (0.003125%)	
TGTCCAGGTTCTTGATGGCATTGCCCAGGGCAGCCACCAC	71462 (0.254515%)	
TGTCGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCA	6293 (0.022413%)	
TGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTCCTGTT	488 (0.001738%)	
TGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTG CGTTTTGATGCGAAGGCTTCTCAGATGAT	146 (0.001300%)	
TGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTT TGCGTTTTGATGCGAAGGCTTCTCAGATG	29 (0.000258%)	
TGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCA CACAGGAACTTGTCCAGGGAAGCGTGGAC	195 (0.001736%)	
TGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACA CAGGAACTTGTCCAGGGAAGCGTGGACCT	1142 (0.010168%)	
TTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCG	151 (0.000538%)	
TTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACG	167 (0.000595%)	
TTAGATCGGAAGAGCACACGTCTGAACTCCAGTCACACTG	73992 (0.263526%)	
TTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCACACGC	345 (0.001229%)	
TTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGAC ATGAACTTGTCGACGGCAGAGTGCACCTC	83 (0.000739%)	

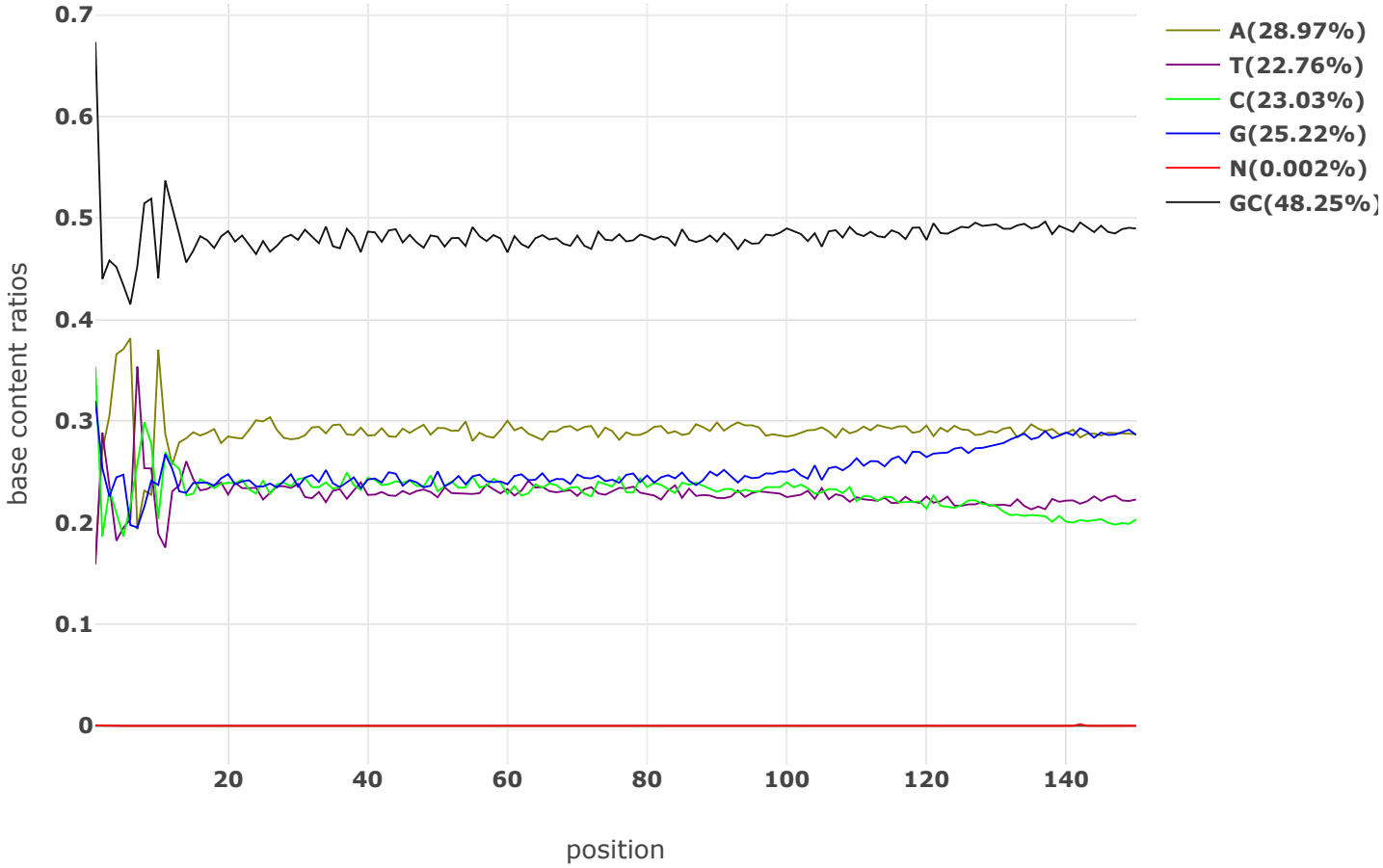
TTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCG	225 (0.000801%)	
TTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTG	327 (0.001165%)	
TTCACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCC	4919 (0.017519%)	
TTCACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTGTC CAGGTTCTTGATGGCATTGCCCAGGGCAG	137 (0.001220%)	
TTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAG ATGCTTTGCGTTTTGATGCGAAGGCTTCT	245 (0.002181%)	
TTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTC CAGGTTCTTGACGGCCTCCCCGAAGGAGG	116 (0.001033%)	
TTCTTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCT GAGATGCTTTGCGTTTTGATGCGAAGGCT	26 (0.000232%)	
TTCTTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTGC	704 (0.002507%)	
TTCTTGATGGCATTGCCCAGGGCAGCCACCACTTTCTTGC	369 (0.001314%)	
TTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTA	297 (0.001058%)	
TTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGG	354 (0.001261%)	
TTCTTTTTTT	177766 (0.158280%)	
TTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGA	152 (0.000541%)	
TTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTGCCGT	137 (0.000488%)	
TTGATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCAT	104 (0.000370%)	
TTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATG AACTTGTCGACGGCAGAGTGCACCTCGGG	139 (0.001238%)	
TTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGAC	439 (0.001564%)	
TTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCACGGA	86 (0.000306%)	
TTGCCGAAGTGGGCGGCCAGGACGACGACCAGGATGTCAC	246 (0.000876%)	
TTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGT	465 (0.001656%)	
TTGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCG	234 (0.000833%)	
TTGCGAGTGGCCACCACCACCAGGAAGCACTGACCCAGCA	1049 (0.003736%)	
TTGCGGGCCAGAGCGTGGGCAACCACACGCACCAGCTTCT	5096 (0.018150%)	
TTGGAGAGGGCACCAGCAATGTCATCAACGTGGTTGGCAG	309 (0.001101%)	
TTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGT	57 (0.000203%)	
TTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAG AGAGGGGTTGCGAGTGGCCACCACCACCA	1072 (0.009545%)	
TTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACA GGAACTTGTCCAGGGAAGCGTGGACCTCT	303 (0.002698%)	
TTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCG	327 (0.001165%)	
TTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGA CATGAACTTGTCGACGGCAGAGTGCACCT	89 (0.000792%)	
TTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGC	542 (0.001930%)	
TTTCTTTTTT	78068 (0.069511%)	
TTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCC	756 (0.002693%)	
TTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCG ACATGAACTTGTCGACGGCAGAGTGCACC	323 (0.002876%)	
TTTTCTTTTT	561761 (0.500184%)	

TTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCAC	1897 (0.016891%)	
TTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCA	278 (0.002475%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTA	21384 (0.076160%)	
TTTTTTTTTTTTTTTTTTTT

position

Before filtering: read2: base contents

Value of each position will be shown on mouse over.



Before filtering: read2: KMER counting

Darker background means larger counts. The count will be shown on mouse over.

	AA	AT	AC	AG	TA	TT	TC	TG	CA	CT	CC	CG	GA	GT	GC	GG
AAA	AAAAA	AAAAT	AAAAC	AAAAG	AAATA	AAATT	AAATC	AAATG	AAACA	AAACT	AAACC	AAACG	AAAGA	AAAGT	AAAGC	AAAGG
AAT	AATAA	AATAT	AATAC	AATAG	AATTA	AATTT	AATTC	AATTG	AATCA	AATCT	AATCC	AATCG	AATGA	AATGT	AATGC	AATGG
AAC	AACAA	AACAT	AACAC	AACAG	AACTA	AACTT	AACTC	AACTG	AACCA	AACCT	AACCC	AACCG	AACGA	AACGT	AACGC	AACGG
AAG	AAGAA	AAGAT	AAGAC	AAGAG	AAGTA	AAGTT	AAGTC	AAGTG	AAGCA	AAGCT	AAGCC	AAGCG	AAGGA	AAGGT	AAGGC	AAGGG
ATA	ATAAA	ATAAT	ATAAC	ATAAG	ATATA	ATATT	ATATC	ATATG	ATACA	ATACT	ATACC	ATACG	ATAGA	ATAGT	ATAGC	ATAGG
ATT	ATTAA	ATTAT	ATTAC	ATTAG	ATTTA	ATTTT	ATTTC	ATTTG	ATTCA	ATTCT	ATTCC	ATTCG	ATTGA	ATTGT	ATTGC	ATTGG
ATC	ATCAA	ATCAT	ATCAC	ATCAG	ATCTA	ATCTT	ATCTC	ATCTG	ATCCA	ATCCT	ATCCC	ATCCG	ATCGA	ATCGT	ATCGC	ATCGG
ATG	ATGAA	ATGAT	ATGAC	ATGAG	ATGTA	ATGTT	ATGTC	ATGTG	ATGCA	ATGCT	ATGCC	ATGCG	ATGGA	ATGGT	ATGGC	ATGGG
ACA	ACAAA	ACAAT	ACAAC	ACAAG	ACATA	ACATT	ACATC	ACATG	ACACA	ACACT	ACACC	ACACG	ACAGA	ACAGT	ACAGC	ACAGG
ACT	ACTAA	ACTAT	ACTAC	ACTAG	ACTTA	ACTTT	ACTTC	ACTTG	ACTCA	ACTCT	ACTCC	ACTCG	ACTGA	ACTGT	ACTGC	ACTGG
ACC	ACCAA	ACCAT	ACCAC	ACCAG	ACCTA	ACCTT	ACCTC	ACCTG	ACCCA	ACCCT	ACCCC	ACCCG	ACCGA	ACCGT	ACCGC	ACCGG
ACG	ACGAA	ACGAT	ACGAC	ACGAG	ACGTA	ACGTT	ACGTC	ACGTG	ACGCA	ACGCT	ACGCC	ACGCG	ACGGA	ACGGT	ACGGC	ACGGG
AGA	AGAAA	AGAAT	AGAAC	AGAAG	AGATA	AGATT	AGATC	AGATG	AGACA	AGACT	AGACC	AGACG	AGAGA	AGAGT	AGAGC	AGAGG
AGT	AGTAA	AGTAT	AGTAC	AGTAG	AGTTA	AGTTT	AGTTC	AGTTG	AGTCA	AGTCT	AGTCC	AGTCG	AGTGA	AGTGT	AGTGC	AGTGG
AGC	AGCAA	AGCAT	AGCAC	AGCAG	AGCTA	AGCTT	AGCTC	AGCTG	AGCCA	AGCCT	AGCCC	AGCCG	AGCGA	AGCGT	AGCGC	AGCGG
AGG	AGGAA	AGGAT	AGGAC	AGGAG	AGGTA	AGGTT	AGGTC	AGGTG	AGGCA	AGGCT	AGGCC	AGGCG	AGGGA	AGGGT	AGGGC	AGGGG
TAA	TAAAA	TAAAT	TAAAC	TAAAG	TAATA	TAATT	TAATC	TAATG	TAACA	TAACT	TAACC	TAACG	TAAGA	TAAGT	TAAGC	TAAGG
TAT	TATAA	TATAT	TATAC	TATAG	TATTA	TATTT	TATTC	TATTG	TATCA	TATCT	TATCC	TATCG	TATGA	TATGT	TATGC	TATGG
TAC	TACAA	TACAT	TACAC	TACAG	TACTA	TACTT	TACTC	TACTG	TACCA	TACCT	TACCC	TACCG	TACGA	TACGT	TACGC	TACGG
TAG	TAGAA	TAGAT	TAGAC	TAGAG	TAGTA	TAGTT	TAGTC	TAGTG	TAGCA	TAGCT	TAGCC	TAGCG	TAGGA	TAGGT	TAGGC	TAGGG
TTA	TTAAA	TTAAT	TTAAC	TTAAG	TTATA	TTATT	TTATC	TTATG	TTACA	TTACT	TTACC	TTACG	TTAGA	TTAGT	TTAGC	TTAGG
TTT	TTTAA	TTTAT	TTTAC	TTTAG	TTTTA	TTTTT	TTTTC	TTTTG	TTTCA	TTTCT	TTTCC	TTTCG	TTTGA	TTTGT	TTTGC	TTTGG
TTC	TTCAA	TTCAT	TTCAC	TTCAG	TTCTA	TTCTT	TTCTC	TTCTG	TTCCA	TTCCT	TTCCC	TTCCG	TTCGA	TTCGT	TTCGC	TTCGG
TTG	TTGAA	TTGAT	TTGAC	TTGAG	TTGTA	TTGTT	TTGTC	TTGTG	TTGCA	TTGCT	TTGCC	TTGCG	TTGGA	TTGGT	TTGGC	TTGGG
TCA	TCAAA	TCAAT	TCAAC	TCAAG	TCATA	TCATT	TCATC	TCATG	TCACA	TCACT	TCACC	TCACG	TCAGA	TCAGT	TCAGC	TCAGG
TCT	TCTAA	TCTAT	TCTAC	TCTAG	TCTTA	TCTTT	TCTTC	TCTTG	TCTCA	TCTCT	TCTCC	TCTCG	TCTGA	TCTGT	TCTGC	TCTGG
TCC	TCCAA	TCCAT	TCCAC	TCCAG	TCCTA	TCCTT	TCCTC	TCCTG	TCCCA	TCCCT	TCCCC	TCCCG	TCCGA	TCCGT	TCCGC	TCCGG

TCG	TCGAA	TCGAT	TCGAC	TCGAG	TCGTA	TCGTT	TCGTC	TCGTG	TCGCA	TCGCT	TCGCC	TCGCG	TCGGA	TCGGT	TCGGC	TCGGG
TGA	TGAAA	TGAAT	TGAAC	TGAAG	TGATA	TGATT	TGATC	TGATG	TGACA	TGACT	TGACC	TGACG	TGAGA	TGAGT	TGAGC	TGAGG
TGT	TGTAA	TGTAT	TGTAC	TGTAG	TGTTA	TGTTT	TGTTC	TGTTG	TGTCA	TGTCT	TGTCC	TGTCG	TGTGA	TGTGT	TGTGC	TGTGG
TGC	TGCAA	TGCAT	TGCAC	TGCAG	TGCTA	TGCTT	TGCTC	TGCTG	TGCCA	TGCCT	TGCCC	TGCCG	TGCGA	TGCGT	TGCGC	TGCGG
TGG	TGGAA	TGGAT	TGGAC	TGGAG	TGGTA	TGGTT	TGGTC	TGGTG	TGGCA	TGGCT	TGGCC	TGGCG	TGGGA	TGGGT	TGGGC	TGGGG
CAA	CAAAA	CAAAT	CAAAC	CAAAG	CAATA	CAATT	CAATC	CAATG	CAACA	CAACT	CAACC	CAACG	CAAGA	CAAGT	CAAGC	CAAGG
CAT	CATAA	CATAT	CATAC	CATAG	CATTA	CATTT	CATTC	CATTG	CATCA	CATCT	CATCC	CATCG	CATGA	CATGT	CATGC	CATGG
CAC	CACAA	CACAT	CACAC	CACAG	CACTA	CACTT	CACTC	CACTG	CACCA	CACCT	CACCC	CACCG	CACGA	CACGT	CACGC	CACGG
CAG	CAGAA	CAGAT	CAGAC	CAGAG	CAGTA	CAGTT	CAGTC	CAGTG	CAGCA	CAGCT	CAGCC	CAGCG	CAGGA	CAGGT	CAGGC	CAGGG
CTA	CTAAA	CTAAT	CTAAC	CTAAG	CTATA	CTATT	CTATC	CTATG	CTACA	CTACT	CTACC	CTACG	CTAGA	CTAGT	CTAGC	CTAGG
CTT	CTTAA	CTTAT	CTTAC	CTTAG	CTTTA	CTTTT	CTTTC	CTTTG	CTTCA	CTTCT	CTTCC	CTTCG	CTTGA	CTTGT	CTTGC	CTTGG
CTC	CTCAA	CTCAT	CTCAC	CTCAG	CTCTA	CTCTT	CTCTC	CTCTG	CTCCA	CTCCT	CTCCC	CTCCG	CTCGA	CTCGT	CTCGC	CTCGG
CTG	CTGAA	CTGAT	CTGAC	CTGAG	CTGTA	CTGTT	CTGTC	CTGTG	CTGCA	CTGCT	CTGCC	CTGCG	CTGGA	CTGGT	CTGGC	CTGGG
CCA	CCAAA	CCAAT	CCAAC	CCAAG	CCATA	CCATT	CCATC	CCATG	CCACA	CCACT	CCACC	CCACG	CCAGA	CCAGT	CCAGC	CCAGG
CCT	CCTAA	CCTAT	CCTAC	CCTAG	CCTTA	CCTTT	CCTTC	CCTTG	CCTCA	CCTCT	CCTCC	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	CCCTC	CCCTG	CCCCA	CCCCT	CCCCC	CCCCG	CCCGA	CCCGT	CCCGC	CCCGG
CCG	CCGAA	CCGAT	CCGAC	CCGAG	CCGTA	CCGTT	CCGTC	CCGTG	CCGCA	CCGCT	CCGCC	CCGCG	CCGGA	CCGGT	CCGGC	CCGGG
CGA	CGAAA	CGAAT	CGAAC	CGAAG	CGATA	CGATT	CGATC	CGATG	CGACA	CGACT	CGACC	CGACG	CGAGA	CGAGT	CGAGC	CGAGG
CGT	CGTAA	CGTAT	CGTAC	CGTAG	CGTTA	CGTTT	CGTTC	CGTTG	CGTCA	CGTCT	CGTCC	CGTCG	CGTGA	CGTGT	CGTGC	CGTGG
CGC	CGCAA	CGCAT	CGCAC	CGCAG	CGCTA	CGCTT	CGCTC	CGCTG	CGCCA	CGCCT	CGCCC	CGCCG	CGCGA	CGCGT	CGCGC	CGCGG
CGG	CGGAA	CGGAT	CGGAC	CGGAG	CGGTA	CGGTT	CGGTC	CGGTG	CGGCA	CGGCT	CGGCC	CGGCG	CGGGA	CGGGT	CGGGC	CGGGG
GAA	GAAAA	GAAAT	GAAAC	GAAAG	GAATA	GAATT	GAATC	GAATG	GAACA	GAACT	GAACC	GAACG	GAAGA	GAAGT	GAAGC	GAAGG
GAT	GATAA	GATAT	GATAC	GATAG	GATTA	GATTT	GATTC	GATTG	GATCA	GATCT	GATCC	GATCG	GATGA	GATGT	GATGC	GATGG
GAC	GACAA	GACAT	GACAC	GACAG	GACTA	GACTT	GACTC	GACTG	GACCA	GACCT	GACCC	GACCG	GACGA	GACGT	GACGC	GACGG
GAG	GAGAA	GAGAT	GAGAC	GAGAG	GAGTA	GAGTT	GAGTC	GAGTG	GAGCA	GAGCT	GAGCC	GAGCG	GAGGA	GAGGT	GAGGC	GAGGG
GTA	GTAAA	GTAAT	GTAAC	GTAAG	GTATA	GTATT	GTATC	GTATG	GTACA	GTACT	GTACC	GTACG	GTAGA	GTAGT	GTAGC	GTAGG
GTT	GTTAA	GTTAT	GTTAC	GTTAG	GTTTA	GTTTT	GTTTC	GTTTG	GTTCA	GTTCT	GTTCC	GTTCG	GTTGA	GTTGT	GTTGC	GTTGG
GTC	GTCAA	GTCAT	GTCAC	GTCAG	GTCTA	GTCTT	GTCTC	GTCTG	GTCCA	GTCCT	GTCCC	GTCCG	GTCGA	GTCGT	GTCGC	GTCGG
GTG	GTGAA	GTGAT	GTGAC	GTGAG	GTGTA	GTGTT	GTGTC	GTGTG	GTGCA	GTGCT	GTGCC	GTGCG	GTGGA	GTGGT	GTGGC	GTGGG
GCA	GCAAA	GCAAT	GCAAC	GCAAG	GCATA	GCATT	GCATC	GCATG	GCACA	GCACT	GCACC	GCACG	GCAGA	GCAGT	GCAGC	GCAGG
GCT	GCTAA	GCTAT	GCTAC	GCTAG	GCTTA	GCTTT	GCTTC	GCTTG	GCTCA	GCTCT	GCTCC	GCTCG	GCTGA	GCTGT	GCTGC	GCTGG
GCC	GCCAA	GCCAT	GCCAC	GCCAG	GCCTA	GCCTT	GCCTC	GCCTG	GCCCA	GCCCT	GCCCC	GCCCG	GCCGA	GCCGT	GCCGC	GCCGG
GCG	GCGAA	GCGAT	GCGAC	GCGAG	GCGTA	GCGTT	GCGTC	GCGTG	GCGCA	GCGCT	GCGCC	GCGCG	GCGGA	GCGGT	GCGGC	GCGGG
GGA	GGAAA	GGAAT	GGAAC	GGAAG	GGATA	GGATT	GGATC	GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGAGG
GGT	GGTAA	GGTAT	GGTAC	GGTAG	GGTTA	GGTTT	GGTTC	GGTTG	GGTCA	GGTCT	GGTCC	GGTCG	GGTGA	GGTGT	GGTGC	GGTGG
GGC	GGCAA	GGCAT	GGCAC	GGCAG	GGCTA	GGCTT	GGCTC	GGCTG	GGCCA	GGCCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGCGG
GGG	GGGAA	GGGAT	GGGAC	GGGAG	GGGTA	GGGTT	GGGTC	GGGTG	GGGCA	GGGCT	GGGCC	GGGCG	GGGGA	GGGGT	GGGGC	GGGGG

Before filtering: read2: overrepresented sequences

Sampling rate: 1 / 20

overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 150
AAAA

AAAA

AAAAAAAAATAAAAAAAAAAAAAAAAA	10 (0.000089%)	
AAAAAAAAAAAAAAAAA

AAAAAATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGA	4454 (0.015863%)	
AAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGA	3572 (0.012722%)	
AAAAACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAA AAATAGAAGACAGGAAAAATGAGAGAAAA	585 (0.005209%)	
AAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGC AACCCCTCTCTGCTGACCCCAGAGGTCCA	2188 (0.019482%)	
AAAAAGAAAA	77833 (0.069301%)	
AAAAAGAAAATAGAAAATTATAGAAAAAAAGAAAAACCCA	58 (0.000207%)	
AAAAAGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCA	81 (0.000288%)	
AAAAAGAAATTAGAATATAGAAAAAAATAAAGAAGAAAAT	63 (0.000224%)	
AAAAAGGAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGG	32369 (0.115284%)	
AAAAATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGA	336 (0.001197%)	
AAAAATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAG	436 (0.001553%)	
AAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAA	769 (0.002739%)	
AAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAA	178 (0.000634%)	
AAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAA	255 (0.000908%)	
AAAACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAA AATAGAAGACAGGAAAAATGAGAGAAAA	592 (0.005271%)	
AAAAGAAAATAGAAAATTATAGAAAAAAAGAAAAACCCAA	101 (0.000360%)	
AAAAGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAA	156 (0.000556%)	
AAAAGGAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGA	382 (0.001361%)	
AAAATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCT	122 (0.000435%)	
AAAATAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCT	155 (0.000552%)	
AAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCT	156 (0.000556%)	
AAAATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAG	289 (0.001029%)	
AAAATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGG	360 (0.001282%)	
AAAATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAA	406 (0.001446%)	
AAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAA	217 (0.000773%)	
AAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAA	150 (0.000534%)	
AAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAAT	167 (0.000595%)	
AAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATT	107 (0.000381%)	
AAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATT	179 (0.000638%)	
AAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAA	449 (0.001599%)	
AAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATT	102 (0.000363%)	
AAACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAA ATAGAAGACAGGAAAAATGAGAGAAAAA	65 (0.000579%)	
AAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTC	781 (0.002782%)	

AAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCA CGCTTCCCTGGACAAGTTCCTGTGTGCCG	621 (0.005529%)	
AAAGAAAATAGAAAATTATAGAAAAAAAGAAAAACCCAAG	144 (0.000513%)	
AAAGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAG	285 (0.001015%)	
AAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAATG	19551 (0.069632%)	
AAAGAGTGTAGATCTCGGTGGTCGCCGTATCATTAAAAAA	201 (0.000716%)	
AAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGA	607 (0.002162%)	
AAAGGAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGAA	258 (0.000919%)	
AAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTG	957 (0.003408%)	
AAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAG CAACCTGCACGCCTACAACCTGCGTGTGG	534 (0.004755%)	
AAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAA	231 (0.000823%)	
AAATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTG	33 (0.000118%)	
AAATAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTG	46 (0.000164%)	
AAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTG	74 (0.000264%)	
AAATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGG	97 (0.000345%)	
AAATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGA	125 (0.000445%)	
AAATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAG	187 (0.000666%)	
AAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAA	182 (0.000648%)	
AAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTA	238 (0.000848%)	
AAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAAT	159 (0.000566%)	
AAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATA	230 (0.000819%)	
AAATTAGAATATAGAAAAAAATAAAGAAGAAAATTGGAAA	210 (0.000748%)	
AAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTT	355 (0.001264%)	
AAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTT	321 (0.001143%)	
AAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAG	158 (0.000563%)	
AAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTT	308 (0.001097%)	
AACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGC	106326 (0.378685%)	
AACCACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCA	1223 (0.004356%)	
AACCACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCA	1320 (0.004701%)	
AACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAA TAGAAGACAGGAAAAATGAGAGAAAAAAT	28 (0.000249%)	
AACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCT	42027 (0.149681%)	
AACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAG CATCAAGAACACCTTCTCCCAGCTGTCCG	84 (0.000748%)	
AACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCT GACTGCCAAGTACCGTTAAGCCGTGTACC	648 (0.005770%)	
AACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTT	111 (0.000988%)	

CAAGTTCCTGTCGCAGTGCTTGCAGGTGG		
AACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGGCTCCTGGGTGACATCC	675 (0.006010%)	
AACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACA	358 (0.003188%)	
AACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCAGACCAAGACCT	146 (0.001300%)	
AACTAGGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCGCCCTAGCCATTTGCACCCTAGTCTT	9321 (0.082993%)	
AACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGC	2968 (0.026427%)	
AACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCG	483 (0.001720%)	
AACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGT	302 (0.002689%)	
AACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGG	384 (0.001368%)	
AACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGT	224 (0.001994%)	
AACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGG	271 (0.000965%)	
AACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGC	57 (0.000508%)	
AACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCA	218 (0.000776%)	
AAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGAAAATTT	173 (0.000616%)	
AAGAAAATAGAAAATTATAGAAAAAAAGAAAAACCCAAGT	123 (0.000438%)	
AAGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGT	249 (0.000887%)	
AAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTG	1410 (0.012554%)	
AAGAAATTAGAATATAGAAAAAAATAAAGAAGAAAATTGG	865 (0.003081%)	
AAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGGCTCCTGGGTGACA	334 (0.002974%)	
AAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACG	216 (0.001923%)	
AAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACG	2550 (0.009082%)	
AAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAG	127 (0.000452%)	
AAGACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGA	174 (0.000620%)	
AAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACG	356 (0.003170%)	
AAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACC	269 (0.002395%)	
AAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAG	3870 (0.013783%)	
AAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGG	307 (0.002733%)	
AAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGTC	631 (0.002247%)	
AAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGG	561 (0.001998%)	
AAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAATGA	318 (0.001133%)	
AAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTC	22 (0.000078%)	
AAGAGTGTAGATCTCGGTGGTCGCCGTATCATTAAAAAAA	187 (0.000666%)	
AAGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCT	143582 (0.511374%)	
AAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCAT	251 (0.000894%)	

AAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGA	49 (0.000436%)	
AAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAACT	68 (0.000242%)	
AAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAGAA	120 (0.000427%)	
AAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCT	352 (0.003134%)	
AAGCTGCCAACCACGTCGATGACATTGCTGGTGCCCTCTC	175 (0.000623%)	
AAGCTGCCAACCACGTTGATGACATTGCTGGTGCCCTCTC	23684 (0.084352%)	
AAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGT	1068 (0.003804%)	
AAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAA	618 (0.002201%)	
AAGGAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGAAA	165 (0.000588%)	
AAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGC	1238 (0.004409%)	
AAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCT	496 (0.004416%)	
AAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCAGACCAAGACCTACTTCC	146 (0.001300%)	
AAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGG	613 (0.002183%)	
AAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAG	139 (0.000495%)	
AAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCG	752 (0.002678%)	
AAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGG	414 (0.003686%)	
AAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCG	673 (0.002397%)	
AAGTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCGCCG	677 (0.002411%)	
AAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGCGCTG	687 (0.002447%)	
AAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCC	1072 (0.003818%)	
AAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGA	197 (0.001754%)	
AAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCC	1537 (0.005474%)	
AAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGT	444 (0.001581%)	
AAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAG	274 (0.000976%)	
AATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGA	20 (0.000071%)	
AATAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGA	41 (0.000146%)	
AATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGA	49 (0.000175%)	
AATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGA	74 (0.000264%)	
AATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGAT	93 (0.000331%)	
AATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGG	882 (0.003141%)	
AATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAAT	206 (0.000734%)	
AATCATGCTAATCTTCATCATCTGAGAAGCCTTCGCATCA	155 (0.000552%)	
AATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTAC	311 (0.001108%)	

AATCTTCATCATCTGAGAAGCCTTCGCATCAAAACGCAAA	14027 (0.049958%)	
AATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATA	78 (0.000278%)	
AATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAG	122 (0.000435%)	
AATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCC	106 (0.000944%)	
AATTAGAATATAGAAAAAAATAAAGAAGAAAATTGGAAAA	71 (0.000253%)	
AATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTG	3972 (0.014146%)	
AATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTG	8837 (0.031473%)	
AATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGT	71 (0.000253%)	
AATTGGGAAAAATGAAAATAGAAAAAAAGAAAATAGAAAA	435 (0.001549%)	
AATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTG	6907 (0.024600%)	
AATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATG	63 (0.000224%)	
ACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCAGAC	90 (0.000801%)	
ACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAA	438 (0.001560%)	
ACAATTGGGAAAAATGAAAATAGAAAAAAAGAAAATAGAA	95 (0.000338%)	
ACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCT	666 (0.002372%)	
ACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACC	5397 (0.048054%)	
ACAGCCGTAATCATGCTAATCTTCATCATCTGAGAAGCCT	44 (0.000157%)	
ACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGG	22 (0.000078%)	
ACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGA	33 (0.000118%)	
ACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAG	335 (0.002983%)	
ACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGA	128 (0.000456%)	
ACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGC	659 (0.002347%)	
ACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGT	28 (0.000249%)	
ACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGA	113 (0.001006%)	
ACCACCTACCCCCAGACCAAGACCTACTTCCCCCACTTCG	549 (0.001955%)	
ACCACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAG	186 (0.000662%)	
ACCACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAG	178 (0.000634%)	
ACCCAACACACCACCAGCCCTCCGACAGCGAGCAGTCAAA	31 (0.000110%)	
ACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAAATC	25 (0.000223%)	
ACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTC	409 (0.001457%)	
ACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGA	79 (0.000703%)	
ACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGA	38 (0.000338%)	
ACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGC	22 (0.000196%)	

AAGAAGGTGGCAGCTGCACTGGTTGAAGC		
ACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGC AAGAAAGTGGTGGCTGCCCTGGGCAATGC	14 (0.000125%)	
ACCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGT	946 (0.003369%)	
ACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTG ACTGCCAAGTACCGTTAAGCCGTGTACCG	209 (0.001861%)	
ACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAG CGTGCTGGCTGAGAAGTACAGATGAGCTG	80 (0.000712%)	
ACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGT	408 (0.001453%)	
ACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTA CCCCTGGACCCAGAGGTTCTTCGCCAACT	295 (0.002627%)	
ACCTACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCA CGGCAAGAAGGTGGCAGCTGCACTGGTTG	149 (0.001327%)	
ACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAA	938 (0.003341%)	
ACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCC AACCACGTTGATGACATTGCTGGTGCCCT	23 (0.000205%)	
ACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCC GAGAACTTCAGGCTCCTGGGTGACATCCT	253 (0.002253%)	
ACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCC TTCGGGGAGGCCGTCAAGAACCTGGACAG	106 (0.000944%)	
ACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCC ACTCGCAACCCCTCTCTGCTGACCCCAGA	122 (0.001086%)	
ACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGC	552 (0.001966%)	
ACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGT	366 (0.001304%)	
ACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGT	701 (0.002497%)	
ACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTAC CGTGGTCAGAGCTGGACCCAACACACCAC	448 (0.003989%)	
ACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCC CAGCTGTCCGAGCTGCACTGCGACAAGCT	404 (0.003597%)	
ACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAA	635 (0.002262%)	
ACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCA	224 (0.000798%)	
ACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGT CAAGAACCTGGACAGCATCAAGAACACCT	10397 (0.092573%)	
ACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATG TTCACCACCTACCCCCAGACCAAGACCTA	76 (0.000677%)	
ACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGA	3400 (0.012109%)	
ACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGA	3680 (0.013106%)	
ACTAGGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGG TCGCCCTAGCCATTTGCACCCTAGTCTTA	29 (0.000258%)	
ACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCG GCGGCCAGGCCGAGGAATATGGCGCCGAC	110 (0.000979%)	
ACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTG	1268 (0.004516%)	
ACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCAC TGTGCTGACTGCCAAGTACCGTTAAGCCG	702 (0.006251%)	
ACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGC CATGCCTGTGTACCATCAATAAAAAATAC	66 (0.000588%)	
ACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGC	131 (0.000467%)	
ACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGC	174 (0.000620%)	
ACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACG CTTCCCTGGACAAGTTCCTGTGTGCCGTG	86 (0.000766%)	
ACTGGTTGAAGCTGCCAACCACGTCGATGACATTGCTGGT	302 (0.001076%)	
ACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGC	218 (0.000776%)	

ACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAG GTCCACGCTTCCCTGGACAAGTTCCTGTG	82 (0.000730%)	
ACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGT	1558 (0.005549%)	
ACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGC	1627 (0.005795%)	
ACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGAC TGCCAGGCTGCCTGGCAGAAGCTGGTGCG	185 (0.001647%)	
ACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCA CTGGTTGAAGCTGCCAACCACGTTGATGA	620 (0.005520%)	
ACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCC CTGGGCAATGCCATCAAGAACCTGGACAA	2516 (0.022402%)	
ACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAA GCTGCCAACCACGTTGATGACATTGCTGG	20 (0.000178%)	
ACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTG	2927 (0.010425%)	
ACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAA	238 (0.000848%)	
AGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAAGA	227 (0.000808%)	
AGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAATCAAA	448 (0.001596%)	
AGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCG	105 (0.000374%)	
AGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGG	230 (0.000819%)	
AGAAAATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTG	710 (0.002529%)	
AGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTG	1293 (0.004605%)	
AGAAAATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATA	2330 (0.008298%)	
AGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAA	189 (0.000673%)	
AGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAA	437 (0.001556%)	
AGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAA	1085 (0.003864%)	
AGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTC AGCAACCTGCACGCCTACAACCTGCGTGT	785 (0.006990%)	
AGAAATTAGAATATAGAAAAAAATAAAGAAGAAAATTGGA	378 (0.001346%)	
AGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGAC CCCGAGAACTTCAGGCTCCTGGGTGACAT	1048 (0.009331%)	
AGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCT	1708 (0.006083%)	
AGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCC GACTGCCAGGCTGCCTGGCAGAAGCTGGT	1052 (0.009367%)	
AGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTT	304 (0.001083%)	
AGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTA	404 (0.001439%)	
AGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAG	2722 (0.009695%)	
AGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAA	202 (0.000719%)	
AGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAG	204 (0.000727%)	
AGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAA	6005 (0.021387%)	
AGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAAAAACAGGAGCGTCCGGC CGCGCCGCCGCGCCGGGCCCGACAGCTTC	184 (0.001638%)	
AGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTG TCCGAGCTGCACTGCGACAAGCTGCACGT	565 (0.005031%)	
AGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGT	1747 (0.006222%)	

AGAATATAGAAAAAAATAAAGAAGAAAATTGGAAAATAGA	592 (0.002108%)	
AGACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGA	115 (0.000410%)	
AGACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAG	121 (0.000431%)	
AGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCA GCTGCACTGGTTGAAGCTGCCAACCACGT	74 (0.000659%)	
AGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTG GCTGCCCTGGGCAATGCCATCAAGAACCT	61 (0.000543%)	
AGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAATCA	76 (0.000271%)	
AGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAG	37 (0.000132%)	
AGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGC	33 (0.000118%)	
AGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGA	3023 (0.010767%)	
AGAGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAAT	40034 (0.142583%)	
AGAGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATC	146602 (0.522130%)	
AGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGA GGAGAAGCAGCTCATCACCGGCCTCTGGG	377 (0.003357%)	
AGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGTCG	607 (0.002162%)	
AGAGCTGGACCCAACACACCACCAGCCCTCCGACAGCGAG	70 (0.000249%)	
AGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAGAA	249 (0.000887%)	
AGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGG	536 (0.001909%)	
AGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAA	308 (0.001097%)	
AGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTG	1164 (0.004146%)	
AGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAG CCGTGTACCGTGGTCAGAGCTGGACCCAA	953 (0.008485%)	
AGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGG CCAGGCCGAGGAATATGGCGCCGACGCCC	4168 (0.037111%)	
AGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCT	97 (0.000345%)	
AGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAG CAGCTCATCACCGGCCTCTGGGGCAAGGT	1142 (0.010168%)	
AGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGC CAGGCTCTGTCTGAGCTCAGCAACCTGCA	511 (0.004550%)	
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTC	68427 (0.243706%)	
AGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATT	359 (0.001279%)	
AGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAG CCGAGGAGAAGCAGCTCATCACCGGCCTC	411 (0.003659%)	
AGCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAA	270 (0.000962%)	
AGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTT CCTGTCGCAGTGCTTGCAGGTGGTGCTGG	298 (0.002653%)	
AGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCT TCTCCCAGCTGTCCGAGCTGCACTGCGAC	41 (0.000365%)	
AGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGG AGAAGCAGCTCATCACCGGCCTCTGGGGC	52 (0.000463%)	
AGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAG ATGAGCTGTCAGCCATGCCTGTGTACCAT	584 (0.005200%)	
AGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCG	545 (0.001941%)	
AGCCGTAATCATGCTAATCTTCATCATCTGAGAAGCCTTC	45 (0.000160%)	

AGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAACTA	95 (0.000338%)	
AGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCC	995 (0.003544%)	
AGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCG GCCTCTGGGGCAAGGTCAACGTGGCCGAG	180 (0.001603%)	
AGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAGAAA	100 (0.000356%)	
AGCGTCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCT	48735 (0.173572%)	
AGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGTCGCC	530 (0.001888%)	
AGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTC CTGGTGGTGGTGGCCACTCGCAACCCCTC	1608 (0.014317%)	
AGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTG ATCGTCTACCCCTGGACCCAGAGGTTCTT	1167 (0.010391%)	
AGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTT	2391 (0.008516%)	
AGCTGCACTGGTTGAAGCTGCCAACCACGTCGATGACATT	488 (0.001738%)	
AGCTGCCAACCACGTCGATGACATTGCTGGTGCCCTCTCC	777 (0.002767%)	
AGCTGCCAACCACGTTGATGACATTGCTGGTGCCCTCTCC	957 (0.003408%)	
AGCTGGACCCAACACACCACCAGCCCTCCGACAGCGAGCA	29 (0.000103%)	
AGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTA	3267 (0.011636%)	
AGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCC	1137 (0.004049%)	
AGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAG	135 (0.000481%)	
AGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGA	162 (0.000577%)	
AGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGG	58 (0.000207%)	
AGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAG	207 (0.000737%)	
AGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAA	196 (0.000698%)	
AGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTC	2421 (0.008623%)	
AGGAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGAAAA	770 (0.002742%)	
AGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCT	3099 (0.011037%)	
AGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAGAAGG	262 (0.000933%)	
AGGAGCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGT	234 (0.000833%)	
AGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAA	48 (0.000171%)	
AGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCA	62 (0.000221%)	
AGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAG AAGTACAGATGAGCTGTCAGCCATGCCTG	94 (0.000837%)	
AGGATGTTCCACTCCTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCA GATCCGTGGCCATGGCAAGAAAGTGGTGG	250 (0.002226%)	
AGGATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAA	731 (0.002603%)	
AGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGACCAA	76 (0.000271%)	
AGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACC ACCTACCCCCAGACCAAGACCTACTTCCC	65 (0.000579%)	
AGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCC	2271 (0.008088%)	

AGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCA GGCTGCCTGGCAGAAGCTGGTGCGTGTGG	237 (0.002110%)	
AGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTG TCGCAGTGCTTGCAGGTGGTGCTGGCTAC	130 (0.001158%)	
AGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGC	21318 (0.075925%)	
AGGGAAAGAGTGTAGATCTCGGTGGTCGCCGTATCATTAA	344 (0.001225%)	
AGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGG	153 (0.000545%)	
AGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGG	58 (0.000207%)	
AGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGC	166 (0.000591%)	
AGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGC	110 (0.000392%)	
AGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGT	138 (0.000491%)	
AGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGG	200 (0.000712%)	
AGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCC GTGTACCGTGGTCAGAGCTGGACCCAACA	93 (0.000828%)	
AGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCC AGGCCGAGGAATATGGCGCCGACGCCCTG	383 (0.003410%)	
AGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCT GTCAGCCATGCCTGTGTACCATCAATAAA	29 (0.000258%)	
AGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCC GAGCTGCACTGCGACAAGCTGCACGTGGA	257 (0.002288%)	
AGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGA	558 (0.001987%)	
AGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCC	319 (0.001136%)	
AGGTTCACTCATCTCCCTCACAGCCGTAATCATGCTAATC	52 (0.000185%)	
AGGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCG CCCTAGCCATTTGCACCCTAGTCTTATAC	45 (0.000401%)	
AGTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCGCCGC	588 (0.002094%)	
AGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGCGCTGC	623 (0.002219%)	
AGTAGGTTCACTCATCTCCCTCACAGCCGTAATCATGCTA	574 (0.002044%)	
AGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCC	126 (0.000449%)	
AGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTC	41 (0.000146%)	
AGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTC GGGAACCTGTCCAGCGCCACGGCCATCGT	143 (0.001273%)	
AGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCT	2213 (0.007882%)	
AGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGAC AAGTTCCTGTGTGCCGTGGGCACTGTGCT	1960 (0.017452%)	
AGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGA	1087 (0.003871%)	
AGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCA ACCTGCACGCCTACAACCTGCGTGTGGAC	138 (0.001229%)	
AGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCA GCTCATCACCGGCCTCTGGGGCAAGGTCA	896 (0.007978%)	
AGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCG	1411 (0.005025%)	
AGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTA	297 (0.001058%)	
AGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAGG	6669 (0.023752%)	
ATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAA	121 (0.000431%)	

ATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAA	35 (0.000125%)	
ATAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAA	48 (0.000171%)	
ATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAA	55 (0.000196%)	
ATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGAT	192 (0.000684%)	
ATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGATT	226 (0.000805%)	
ATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGG	1235 (0.004399%)	
ATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATA	358 (0.001275%)	
ATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGT GGACCCCGTGAACTTCAAGTTCCTGTCGC	398 (0.003544%)	
ATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGT CTACCCCTGGACCCAGAGGTTCTTCGCCA	232 (0.002066%)	
ATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTC	596 (0.002123%)	
ATCATGCTAATCTTCATCATCTGAGAAGCCTTCGCATCAA	80 (0.000285%)	
ATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGA GGAATATGGCGCCGACGCCCTGGAGAGGA	1130 (0.010061%)	
ATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCA GGCTCTGTCTGAGCTCAGCAACCTGCACG	157 (0.001398%)	
ATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACT	375 (0.001336%)	
ATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGG	774 (0.002757%)	
ATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACC	754 (0.002685%)	
ATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGG	788 (0.002806%)	
ATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGC	207 (0.000737%)	
ATCTTCATCATCTGAGAAGCCTTCGCATCAAAACGCAAAG	275 (0.000979%)	
ATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGG	421 (0.001499%)	
ATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCA	935 (0.003330%)	
ATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAG	109 (0.000388%)	
ATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGA	100 (0.000356%)	
ATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTG CGTGTGGACCCCGTGAACTTCAAGTTCCT	360 (0.003205%)	
ATGCTAATCTTCATCATCTGAGAAGCCTTCGCATCAAAAC	91 (0.000324%)	
ATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCT GAGCTCAGCAACCTGCACGCCTACAACCT	146 (0.001300%)	
ATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGA ATATGGCGCCGACGCCCTGGAGAGGATGT	552 (0.004915%)	
ATGTTCACCACCTACCCCCAGACCAAGACCTACTTCCCCC	68508 (0.243994%)	
ATTAGAATATAGAAAAAAATAAAGAAGAAAATTGGAAAAT	239 (0.000851%)	
ATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGA	150 (0.000534%)	
ATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGA	181 (0.000645%)	
ATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTT	131 (0.000467%)	
ATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCC	2278 (0.008113%)	

ATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGG	1950 (0.017363%)	
ATTGGGAAAAATGAAAATAGAAAAAAAGAAAATAGAAAAT	238 (0.000848%)	
ATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGA	170 (0.000605%)	
ATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAA	1265 (0.004505%)	
ATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGA	159 (0.000566%)	
CAAAAAAA

CAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCAGACCAAGACCTACTTC	845 (0.007524%)	
CAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAA	555 (0.001977%)	
CAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTC	6525 (0.023239%)	
CAAGTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCGCC	699 (0.002490%)	
CAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGCGCT	787 (0.002803%)	
CAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAAATCAAA	430 (0.003829%)	
CAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACC	3476 (0.012380%)	
CAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAG	1757 (0.006258%)	
CAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTC	220 (0.001959%)	
CAATTGGGAAAAATGAAAATAGAAAAAAAGAAAATAGAAA	819 (0.002917%)	
CAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGAT	1108 (0.003946%)	
CACAGCCGTAATCATGCTAATCTTCATCATCTGAGAAGCC	320 (0.001140%)	
CACCACCTACCCCCAGACCAAGACCTACTTCCCCCACTTC	955 (0.003401%)	
CACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAAC	557 (0.004959%)	
CACCTACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTT	23113 (0.205795%)	
CACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTG	1307 (0.004655%)	
CACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAG	2827 (0.025171%)	
CACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAG	2650 (0.009438%)	
CACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTG	3492 (0.012437%)	
CACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACACCA	2976 (0.026498%)	
CACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGC	1361 (0.012118%)	
CACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCA	26133 (0.093074%)	
CACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGC	1315 (0.004683%)	
CACGGCTGCCCTCCCCCATTCCACACATTCGAAGAACCAG	23789 (0.084726%)	
CACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTG	429 (0.001528%)	
CACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTG	618 (0.002201%)	
CACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGT	816 (0.002906%)	
CACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCC	4385 (0.039043%)	
CACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAATAAAAAATA	126 (0.001122%)	
CACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGGC	553 (0.001970%)	
CACTGGTTGAAGCTGCCAACCACGTCGATGACATTGCTGG	1726 (0.006147%)	
CACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTTGATGACATTGCTG	59 (0.000525%)	
CACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCT	3280 (0.011682%)	

CAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCA	3970 (0.014139%)	
CAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAAAAACAGGAGCGTCCGG CCGCGCCGCCGCGCCGGGCCCGACAGCTT	17327 (0.154277%)	
CAGAGCCAAGTCCGGTGCCCGGAAATCGCCCAAGAAGAAG	435 (0.001549%)	
CAGAGCTGGACCCAACACACCACCAGCCCTCCGACAGCGA	188 (0.000670%)	
CAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGT	73985 (0.263501%)	
CAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAA GCCGTGTACCGTGGTCAGAGCTGGACCCA	19331 (0.172121%)	
CAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCG GCCAGGCCGAGGAATATGGCGCCGACGCC	1379 (0.012278%)	
CAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAA GCAGCTCATCACCGGCCTCTGGGGCAAGG	5711 (0.050850%)	
CAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAG CCAGGCTCTGTCTGAGCTCAGCAACCTGC	1244 (0.011076%)	
CAGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCT	269483 (0.959776%)	
CAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTG GGGCAAGGTCAACGTGGCCGAGTGCGGCG	2972 (0.026462%)	
CAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGT TCCTGTCGCAGTGCTTGCAGGTGGTGCTG	921 (0.008200%)	
CAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACA GATGAGCTGTCAGCCATGCCTGTGTACCA	1579 (0.014059%)	
CAGCCGTAATCATGCTAATCTTCATCATCTGAGAAGCCTT	189 (0.000673%)	
CAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCC	1023 (0.003643%)	
CAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACC GGCCTCTGGGGCAAGGTCAACGTGGCCGA	704 (0.006268%)	
CAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCT GATCGTCTACCCCTGGACCCAGAGGTTCT	37472 (0.333646%)	
CAGCTGCACTGGTTGAAGCTGCCAACCACGTCGATGACAT	1593 (0.005674%)	
CAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACC	1472 (0.005243%)	
CAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGA	116 (0.000413%)	
CAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAG	148 (0.000527%)	
CAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCC	3040 (0.010827%)	
CAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCC AGGCTGCCTGGCAGAAGCTGGTGCGTGTG	1553 (0.013828%)	
CAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCT GTCGCAGTGCTTGCAGGTGGTGCTGGCTA	409 (0.003642%)	
CAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACG	2550 (0.009082%)	
CAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGG	168 (0.000598%)	
CAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGG	242 (0.000862%)	
CAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCC	289 (0.001029%)	
CAGTAGGTTCACTCATCTCCCTCACAGCCGTAATCATGCT	221 (0.000787%)	
CAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGG TGGTGGTGGCCACTCGCAACCCCTCTCTG	625 (0.005565%)	
CAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTC	1765 (0.006286%)	
CAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGA CAAGTTCCTGTGTGCCGTGGGCACTGTGC	1566 (0.013943%)	
CAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGG	570 (0.002030%)	

CATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTG TGGACCCCGTGAACTTCAAGTTCCTGTCG	570 (0.005075%)	
CATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCG TCTACCCCTGGACCCAGAGGTTCTTCGCC	370 (0.003294%)	
CATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCT	784 (0.002792%)	
CATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCG AGGAATATGGCGCCGACGCCCTGGAGAGG	1511 (0.013454%)	
CATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGAC	463 (0.001649%)	
CATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAG	180 (0.000641%)	
CATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAG	91 (0.000324%)	
CATGCTAATCTTCATCATCTGAGAAGCCTTCGCATCAAAA	65 (0.000232%)	
CATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTC TGAGCTCAGCAACCTGCACGCCTACAACC	246 (0.002190%)	
CATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGG AATATGGCGCCGACGCCCTGGAGAGGATG	1301 (0.011584%)	
CATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCC	1425 (0.005075%)	
CATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCA AACTGCTGGGTCAGTGCTTCCTGGTGGTG	800 (0.007123%)	
CCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTC GCAACCCCTCTCTGCTGACCCCAGAGGTC	4337 (0.038616%)	
CCAACACACCACCAGCCCTCCGACAGCGAGCAGTCAAATG	90 (0.000321%)	
CCAACCACGTCGATGACATTGCTGGTGCCCTCTCCAAGCT	159 (0.000566%)	
CCAACCACGTTGATGACATTGCTGGTGCCCTCTCCAAGCT	131 (0.000467%)	
CCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGG ATGTTCACCACCTACCCCCAGACCAAGAC	889 (0.007916%)	
CCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGG	82676 (0.294454%)	
CCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTG GCAGCTGCACTGGTTGAAGCTGCCAACCA	4744 (0.042240%)	
CCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTG GTGGCTGCCCTGGGCAATGCCATCAAGAA	2983 (0.026560%)	
CCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGC TTCCTGGTGGTGGTGGCCACTCGCAACCC	1300 (0.011575%)	
CCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATC AAGAACACCTTCTCCCAGCTGTCCGAGCT	2293 (0.020417%)	
CCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAATAG AAGACAGGAAAAATGAGAGAAAAAATCAA	65 (0.000579%)	
CCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGA	3218 (0.011461%)	
CCACCTACCCCCAGACCAAGACCTACTTCCCCCACTTCGA	366 (0.001304%)	
CCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGG CCACTCGCAACCCCTCTCTGCTGACCCCA	8828 (0.078603%)	
CCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGA	1301 (0.004634%)	
CCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACT	2605 (0.009278%)	
CCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGT ACCGTGGTCAGAGCTGGACCCAACACACC	2232 (0.019873%)	
CCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCT CCCAGCTGTCCGAGCTGCACTGCGACAAG	617 (0.005494%)	
CCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGG	332 (0.001182%)	
CCACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGT	9315 (0.033176%)	
CCACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGT	10131 (0.036082%)	

CCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGC	1868 (0.016632%)	
CCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGT	335 (0.001193%)	
CCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTTGATGACATTGCT	130 (0.001158%)	
CCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCC	3873 (0.013794%)	
CCAGAGCCAAGTCCGGTGCCCGGAAATCGCCCAAGAAGAA	20840 (0.074223%)	
CCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCC	2045 (0.018208%)	
CCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAG	1227 (0.010925%)	
CCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTG	23787 (0.211796%)	
CCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGC	692 (0.006161%)	
CCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGT	1678 (0.014941%)	
CCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGC	777 (0.002767%)	
CCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGAC	247 (0.000880%)	
CCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCT	922 (0.008209%)	
CCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCAC	1627 (0.005795%)	
CCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTC	158 (0.001407%)	
CCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAA	330 (0.001175%)	
CCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAAC	121 (0.001077%)	
CCCAACACACCACCAGCCCTCCGACAGCGAGCAGTCAAAT	43 (0.000153%)	
CCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCT	2829 (0.010076%)	
CCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGC	304 (0.002707%)	
CCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAAATCA	567 (0.005048%)	
CCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGG	1988 (0.007080%)	
CCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAA	1611 (0.014344%)	
CCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGG	27209 (0.096906%)	
CCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTTGATGACATTGC	2448 (0.021797%)	
CCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGC	10324 (0.036769%)	
CCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGC	1414 (0.012590%)	
CCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACC	2616 (0.023293%)	
CCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAA	2347 (0.020897%)	
CCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGG	485 (0.004318%)	
CCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGA	1270 (0.004523%)	
CCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAG	1438 (0.012804%)	
CCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTG	253 (0.002253%)	

CCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGAC	175 (0.001558%)	
CCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCG	919 (0.008183%)	
CCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCT	21 (0.000187%)	
CCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCC	32 (0.000285%)	
CCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCA	162 (0.001442%)	
CCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTC	383 (0.001364%)	
CCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCA	1990 (0.017719%)	
CCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGT	3427 (0.030514%)	
CCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGG	5687 (0.020255%)	
CCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCG	1356 (0.004829%)	
CCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAA	877 (0.007809%)	
CCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCG	644 (0.002294%)	
CCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGT	584 (0.005200%)	
CCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCG	549 (0.004888%)	
CCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTG	382 (0.003401%)	
CCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGAC	869 (0.003095%)	
CCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACACCACCAGCCC	564 (0.005022%)	
CCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTT	537 (0.004781%)	
CCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTG	541 (0.001927%)	
CCCTGTGGAGGATGTTCCACTCCTACCCCCCGACCAAGAC	275 (0.000979%)	
CCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCA	186 (0.001656%)	
CCGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCC	6747 (0.060074%)	
CCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGT	5342 (0.019026%)	
CCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGT	1892 (0.006738%)	
CCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAA	3990 (0.014211%)	
CCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTT	1271 (0.004527%)	
CCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGAC	690 (0.002457%)	
CCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAAT	1339 (0.011922%)	
CCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCAT	858 (0.007640%)	
CCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGC	1298 (0.004623%)	
CCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGC	1423 (0.012670%)	
CCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGC	2200 (0.007835%)	
CCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCC	506 (0.004505%)	

CCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCC GACGCCCTGGAGAGGATGTTCACCACCTA	1020 (0.009082%)	
CCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCT	61 (0.000217%)	
CCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCG TGCTGGCTGAGAAGTACAGATGAGCTGTC	140 (0.001247%)	
CCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATA	238 (0.000848%)	
CCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCAC	398 (0.001417%)	
CCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCA	11142 (0.039683%)	
CCGGGCCCGACAGCTTCTAACCAAATAAAGCTCACCCTGT	103 (0.000367%)	
CCGTAATCATGCTAATCTTCATCATCTGAGAAGCCTTCGC	583 (0.002076%)	
CCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCAC GTGGACCCCGAGAACTTCAGGCTCCTGGG	9095 (0.080981%)	
CCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCC TGTGTACCATCAATAAAAAATACTCTTGC	161 (0.001434%)	
CCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGG CTCTGTCTGAGCTCAGCAACCTGCACGCC	820 (0.007301%)	
CCTACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCAC GGCAAGAAGGTGGCAGCTGCACTGGTTGA	780 (0.006945%)	
CCTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCAT GGCAAGAAAGTGGTGGCTGCCCTGGGCAA	155 (0.001380%)	
CCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCT GCACTGGTTGAAGCTGCCAACCACGTTGA	3679 (0.032757%)	
CCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCT GCCCTGGGCAATGCCATCAAGAACCTGGA	4816 (0.042881%)	
CCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAG	737 (0.002625%)	
CCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCA ACCACGTTGATGACATTGCTGGTGCCCTC	108 (0.000962%)	
CCTCACAGCCGTAATCATGCTAATCTTCATCATCTGAGAA	4746 (0.016903%)	
CCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTC ATCACCGGCCTCTGGGGCAAGGTCAACGT	911 (0.008111%)	
CCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTC AGTGCTTCCTGGTGGTGGTGGCCACTCGC	1876 (0.016704%)	
CCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACT GCCAAGTACCGTTAAGCCGTGTACCGTGG	1841 (0.016392%)	
CCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACT	1329 (0.004733%)	
CCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTC AGAGCTGGACCCAACACACCACCAGCCCT	871 (0.007755%)	
CCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCG AGAACTTCAGGCTCCTGGGTGACATCCTG	2143 (0.019081%)	
CCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGC	3873 (0.013794%)	
CCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGC	38245 (0.136211%)	
CCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGG TTGCCCACGCTCTGGCCCGCAAGTACCAC	2630 (0.023417%)	
CCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCT ACAACCTGCGTGTGGACCCCGTGAACTTC	640 (0.005698%)	
CCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGC TGGCTGAGAAGTACAGATGAGCTGTCAGC	461 (0.004105%)	
CCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTC	1683 (0.005994%)	
CCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTG CCTGGCAGAAGCTGGTGCGTGTGGTTGCC	801 (0.007132%)	
CCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTC	5096 (0.018150%)	
CCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCC TGTGTGCCGTGGGCACTGTGCTGACTGCC	666 (0.005930%)	

CCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGG	867 (0.003088%)	
CCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCT TCGGGGAGGCCGTCAAGAACCTGGACAGC	1007 (0.008966%)	
CCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTG	1622 (0.005777%)	
CCTGTGGAGGATGTTCCACTCCTACCCCCCGACCAAGACC	301 (0.001072%)	
CCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGT	3297 (0.011742%)	
CCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAACTAACAAGCACGAACATCGAATGAATCCACGGCTGC CCTCCCCCATTCCACACATTCGAAGAACC	10659 (0.094906%)	
CCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCA	2912 (0.010371%)	
CGAAAAAAGAAATTAGAATATAGAAAAAAATAAAGAAGAA	21950 (0.078176%)	
CGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAA GTGGTGGCTGCCCTGGGCAATGCCATCAA	4294 (0.038233%)	
CGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGC	893 (0.003180%)	
CGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTG CCAACCACGTTGATGACATTGCTGGTGCC	180 (0.001603%)	
CGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAAT CGGCGGCCAGGCCGAGGAATATGGCGCCG	1764 (0.015706%)	
CGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTT	2686 (0.009566%)	
CGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTC	11073 (0.039437%)	
CGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAAC	933 (0.003323%)	
CGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTC	843 (0.003002%)	
CGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGACC	755 (0.002689%)	
CGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAG CTGTCAGCCATGCCTGTGTACCATCAATA	167 (0.001487%)	
CGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACT TCGGGAACCTGTCCAGCGCCACGGCCATC	535 (0.004764%)	
CGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTC	1580 (0.005627%)	
CGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGT GCTGACTGCCAAGTACCGTTAAGCCGTGT	2093 (0.018636%)	
CGCAAGTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCG	2727 (0.009712%)	
CGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGCG	1043 (0.003715%)	
CGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCA CCGGCCTCTGGGGCAAGGTCAACGTGGCC	1023 (0.009109%)	
CGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAA	2280 (0.008120%)	
CGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCAC	421 (0.001499%)	
CGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCA CTCGCAACCCCTCTCTGCTGACCCCAGAG	656 (0.005841%)	
CGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCT	2639 (0.009399%)	
CGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGC CTCTGGGGCAAGGTCAACGTGGCCGAGTG	548 (0.004879%)	
CGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACG CCCTGGAGAGGATGTTCACCACCTACCCC	1129 (0.010052%)	
CGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATG	743 (0.002646%)	
CGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCG ACGCCCTGGAGAGGATGTTCACCACCTAC	237 (0.002110%)	
CGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAG	117 (0.000417%)	
CGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTC	1653 (0.005887%)	

CGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCACCCT	389 (0.001385%)	
CGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCA	1527 (0.013596%)	
CGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAA	750 (0.002671%)	
CGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCACC	912 (0.003248%)	
CGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCG	1493 (0.005317%)	
CGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTG	1048 (0.003732%)	
CGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTG	7002 (0.024938%)	
CGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACACCACC	6015 (0.053557%)	
CGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAGAAAAA	326 (0.001161%)	
CGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTG	726 (0.002586%)	
CGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCC	3349 (0.011928%)	
CGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTC	2647 (0.009427%)	
CGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTG	6029 (0.053681%)	
CGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTG	3835 (0.034146%)	
CGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAAC	7314 (0.026049%)	
CGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAG	2434 (0.008669%)	
CGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGA	1228 (0.010934%)	
CGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATC	498 (0.001774%)	
CGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAA	4109 (0.014634%)	
CGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTT	2943 (0.026204%)	
CGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAA	631 (0.002247%)	
CGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAAC	1359 (0.012100%)	
CGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGC	307 (0.002733%)	
CGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCC	2839 (0.010111%)	
CGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTG	21756 (0.193712%)	
CGGGAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGG	6294 (0.056041%)	
CGTAAACCTAACCTTCTTCCCCCAACACTTCCTAGGCCTA	28282 (0.100728%)	
CGTAATCATGCTAATCTTCATCATCTGAGAAGCCTTCGCA	549 (0.001955%)	
CGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGGCTCCTGGGT	2268 (0.020194%)	
CGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCAGACCAAGACCTAC	2583 (0.022999%)	
CGTCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAA	478 (0.001702%)	
CGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTAC	519 (0.004621%)	
CGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGAC	1587 (0.005652%)	

CGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTG	1775 (0.006322%)	
CGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGC GTGTGGTTGCCCACGCTCTGGCCCGCAAG	646 (0.005752%)	
CGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGTCGCCGT	380 (0.001353%)	
CGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCA ACCCCAAGGTGCAAGCCCACGGCAAGAAG	10655 (0.094871%)	
CGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGC TCTGTCTGAGCTCAGCAACCTGCACGCCT	1360 (0.012109%)	
CGTGTAGGGAAAGAGTGTAGATCTCGGTGGTCGCCGTATC	607 (0.002162%)	
CGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCT	1352 (0.004815%)	
CGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAG	2282 (0.008127%)	
CGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGAC	2399 (0.008544%)	
CTAACCTTCTTCCCCCAACACTTCCTAGGCCTAGCCGGAA	1434 (0.005107%)	
CTAATCTTCATCATCTGAGAAGCCTTCGCATCAAAACGCA	4193 (0.014934%)	
CTACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACG GCAAGAAGGTGGCAGCTGCACTGGTTGAA	253 (0.002253%)	
CTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATG GCAAGAAAGTGGTGGCTGCCCTGGGCAAT	131 (0.001166%)	
CTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACC CCAAGGTGCAAGCCCACGGCAAGAAGGTG	660 (0.005877%)	
CTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCC AGCGTGCTGGCTGAGAAGTACAGATGAGC	722 (0.006429%)	
CTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTG CACTGGTTGAAGCTGCCAACCACGTTGAT	592 (0.005271%)	
CTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAA	221 (0.000787%)	
CTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGA	815 (0.002903%)	
CTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAA CCACGTTGATGACATTGCTGGTGCCCTCT	241 (0.002146%)	
CTAGGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGT CGCCCTAGCCATTTGCACCCTAGTCTTAT	235 (0.002092%)	
CTCACAGCCGTAATCATGCTAATCTTCATCATCTGAGAAG	366 (0.001304%)	
CTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGG CGGCCAGGCCGAGGAATATGGCGCCGACG	5375 (0.047858%)	
CTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAA GTTCCTGTCGCAGTGCTTGCAGGTGGTGC	9650 (0.085922%)	
CTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACT	3198 (0.011390%)	
CTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCT GGTGGTGGTGGCCACTCGCAACCCCTCTC	516 (0.004594%)	
CTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGT GCTTCCTGGTGGTGGTGGCCACTCGCAAC	3462 (0.030825%)	
CTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTG	1006 (0.003583%)	
CTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGT	9106 (0.032431%)	
CTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCA TCACCGGCCTCTGGGGCAAGGTCAACGTG	3537 (0.031493%)	
CTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACT	1720 (0.006126%)	
CTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGC TGCCTGGCAGAAGCTGGTGCGTGTGGTTG	1050 (0.009349%)	
CTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACT GCGACAAGCTGCACGTGGACCCCGAGAAC	7848 (0.069878%)	
CTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTC	153251 (0.545810%)	

CTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGT	7767 (0.069156%)	
CTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCA	820 (0.007301%)	
CTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGT	1566 (0.013943%)	
CTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAATAAAAAATACT	2150 (0.019143%)	
CTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCT	2779 (0.009898%)	
CTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCA	3426 (0.030505%)	
CTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGTC	543 (0.001934%)	
CTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTC	505 (0.001799%)	
CTCTTCCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGGGCGCCGAGGAGGAAATCGGAGCCGAGGC	25436 (0.226479%)	
CTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCT	1404 (0.012501%)	
CTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCA	484 (0.001724%)	
CTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCA	1448 (0.005157%)	
CTGCACTGGTTGAAGCTGCCAACCACGTCGATGACATTGC	1487 (0.005296%)	
CTGCCAACCACGTCGATGACATTGCTGGTGCCCTCTCCAA	1862 (0.006632%)	
CTGCCAACCACGTTGATGACATTGCTGGTGCCCTCTCCAA	2285 (0.008138%)	
CTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCC	1151 (0.004099%)	
CTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAA	2504 (0.022295%)	
CTGCCGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGC	3896 (0.034689%)	
CTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAATAAAAAATACTCT	2108 (0.018769%)	
CTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCT	7341 (0.026145%)	
CTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGC	628 (0.002237%)	
CTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGA	948 (0.008441%)	
CTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCA	1950 (0.006945%)	
CTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGG	1544 (0.013748%)	
CTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTG	104308 (0.371498%)	
CTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACACCACCAGCCCTC	360 (0.003205%)	
CTGGACCCAACACACCACCAGCCCTCCGACAGCGAGCAGT	118 (0.000420%)	
CTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCC	3171 (0.011294%)	
CTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGTCCG	2799 (0.009969%)	
CTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCG	2224 (0.007921%)	
CTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCC	3103 (0.011051%)	
CTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGC	1447 (0.005154%)	
CTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGT	1259 (0.011210%)	

GGCCAGCGTGCTGGCTGAGAAGTACAGAT		
CTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCA	1780 (0.015849%)	
CTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCC	279 (0.002484%)	
CTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACC	788 (0.002806%)	
CTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCA	651 (0.005796%)	
CTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCG	867 (0.003088%)	
CTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCC	715 (0.006366%)	
CTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCA	7002 (0.024938%)	
CTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCC	12874 (0.114628%)	
CTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGC	1007 (0.008966%)	
CTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACC	3213 (0.011443%)	
CTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCA	2150 (0.019143%)	
CTGGTTGAAGCTGCCAACCACGTCGATGACATTGCTGGTG	649 (0.002311%)	
CTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGT	1781 (0.006343%)	
CTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGC	5903 (0.021024%)	
CTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCG	333 (0.001186%)	
CTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCA	627 (0.005583%)	
CTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGG	674 (0.002400%)	
CTGTGGAGGATGTTCCACTCCTACCCCCCGACCAAGACCT	972 (0.003462%)	
CTTAACTGTCTCTTACAGGCAATCGGTGAAATTGATCTCCCTGTGCAAAAGCAGGGATAATCCCATAAGACGAGAAGACCCTGTGGAACTTTAAAACCAG	398 (0.003544%)	
CTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCC	6001 (0.021373%)	
CTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGT	5367 (0.047787%)	
CTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTG	15832 (0.056386%)	
CTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCC	6910 (0.024610%)	
CTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGT	6075 (0.054091%)	
CTTCATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCA	677 (0.002411%)	
CTTCCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCC	8231 (0.073288%)	
CTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCT	3871 (0.013787%)	
CTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACACCACCAG	3227 (0.028733%)	
CTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACT	1474 (0.013124%)	
CTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCAC	36653 (0.130541%)	
CTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTTGATGACATTGCTGGT	1563 (0.013917%)	
CTTCGCATCAAAACGCAAAGCATCTCAGCCAGAACTAACAAGCACGAACATCGAATGAATCCACGGCTGCCCTCCCCCATTCCACACATTCGAAGAACCA	501 (0.004461%)	
CTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGG	6666 (0.023741%)	

CTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTC TGGCCCGCAAGTACCACTAAGGAGCAACA	10360 (0.092244%)	
CTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAAC	1225 (0.004363%)	
CTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTAC	1840 (0.006553%)	
GAAAAAAAAA	392445 (0.349428%)	
GAAAAAAAA

CCGAGAACTTCAGGCTCCTGGGTGACATC		
GAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGAC	285 (0.002538%)	
GAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTG	1417 (0.005047%)	
GAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTG	901 (0.008022%)	
GAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGAAAATT	721 (0.002568%)	
GAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTA	340 (0.001211%)	
GAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAG	376 (0.001339%)	
GAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGA	5651 (0.020126%)	
GAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGT	800 (0.002849%)	
GAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAG	351 (0.001250%)	
GAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTT	231 (0.000823%)	
GAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCA	16212 (0.057740%)	
GAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAAC	315 (0.001122%)	
GAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAGA	185 (0.000659%)	
GAAGCTGCCAACCACGTCGATGACATTGCTGGTGCCCTCT	163 (0.000581%)	
GAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAG	2757 (0.009819%)	
GAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTG	645 (0.005743%)	
GAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTC	1177 (0.004192%)	
GAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCC	2952 (0.010514%)	
GAATATAGAAAAAAATAAAGAAGAAAATTGGAAAATAGAA	146 (0.000520%)	
GACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCAGA	1681 (0.014967%)	
GACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCA	805 (0.002867%)	
GACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACACCACCAGCCCTCCGA	518 (0.004612%)	
GACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAG	57 (0.000203%)	
GACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGG	59 (0.000210%)	
GACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGA	897 (0.007987%)	
GACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGG	647 (0.002304%)	
GACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACG	2492 (0.008875%)	
GACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGG	118 (0.001051%)	
GACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAG	253 (0.002253%)	
GACCCAACACACCACCAGCCCTCCGACAGCGAGCAGTCAA	23 (0.000082%)	
GACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGG	87 (0.000775%)	
GACCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCG	3990 (0.014211%)	
GACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTA	198 (0.001763%)	

CAGCCCCGAGGTGCACTCTGCCGTCGACA		
GACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGG	2557 (0.009107%)	
GACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGG CTGCCCTGGGCAATGCCATCAAGAACCTG	1269 (0.011299%)	
GACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCA	1431 (0.005097%)	
GACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGC CAACCACGTTGATGACATTGCTGGTGCCC	60 (0.000534%)	
GACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATC GGCGGCCAGGCCGAGGAATATGGCGCCGA	331 (0.002947%)	
GACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTG	411 (0.001464%)	
GACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGG	4996 (0.017793%)	
GAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAATCAA	411 (0.001464%)	
GAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGC	123 (0.000438%)	
GAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCG	203 (0.000723%)	
GAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCC	7258 (0.025850%)	
GAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCC CGACTGCCAGGCTGCCTGGCAGAAGCTGG	38113 (0.339353%)	
GAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAA	3484 (0.012408%)	
GAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGA	788 (0.002806%)	
GAGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAATC	201 (0.000716%)	
GAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAA	168 (0.000598%)	
GAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAG	149 (0.000531%)	
GAGATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCT	208580 (0.742867%)	
GAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACA GCCGAGGAGAAGCAGCTCATCACCGGCCT	1335 (0.011887%)	
GAGCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGA	82 (0.000292%)	
GAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAG GAGAAGCAGCTCATCACCGGCCTCTGGGG	66 (0.000588%)	
GAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCC	563 (0.002005%)	
GAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGTCGC	443 (0.001578%)	
GAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACT	1617 (0.005759%)	
GAGCTGGACCCAACACACCACCAGCCCTCCGACAGCGAGC	63 (0.000224%)	
GAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAG	142 (0.000506%)	
GAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACT	213 (0.000759%)	
GAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAGAAG	220 (0.000784%)	
GAGGAGCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAG	21192 (0.075476%)	
GAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGA	142 (0.000506%)	
GAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCC	189 (0.000673%)	
GAGGATGTTCCACTCCTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACC AGATCCGTGGCCATGGCAAGAAAGTGGTG	202 (0.001799%)	
GAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAA	1551 (0.005524%)	

GAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGACCA	203 (0.000723%)	
GAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCG	136 (0.000484%)	
GAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGG	764 (0.002721%)	
GAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGC CGTGTACCGTGGTCAGAGCTGGACCCAAC	555 (0.004942%)	
GAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGC CAGGCCGAGGAATATGGCGCCGACGCCCT	362 (0.003223%)	
GAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGC TGTCAGCCATGCCTGTGTACCATCAATAA	250 (0.002226%)	
GAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAA GTACAGATGAGCTGTCAGCCATGCCTGTG	520 (0.004630%)	
GAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTT	65 (0.000232%)	
GAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTT CGGGAACCTGTCCAGCGCCACGGCCATCG	87 (0.000775%)	
GAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGC AGCTCATCACCGGCCTCTGGGGCAAGGTC	1337 (0.011904%)	
GATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCC AGGCTCTGTCTGAGCTCAGCAACCTGCAC	354 (0.003152%)	
GATCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCG	11844 (0.042183%)	
GATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTG	298 (0.001061%)	
GATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCC	1520 (0.005414%)	
GATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAA	3341 (0.011899%)	
GCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCAC	1382 (0.004922%)	
GCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGAC AGCATCAAGAACACCTTCTCCCAGCTGTC	938 (0.008352%)	
GCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTG CTGACTGCCAAGTACCGTTAAGCCGTGTA	916 (0.008156%)	
GCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAG CTCAGCAACCTGCACGCCTACAACCTGCG	1056 (0.009402%)	
GCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAG CTGTCCGAGCTGCACTGCGACAAGCTGCA	1210 (0.010774%)	
GCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCA	16116 (0.057398%)	
GCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGC CGAGGAGAAGCAGCTCATCACCGGCCTCT	1482 (0.013196%)	
GCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACA CCTTCTCCCAGCTGTCCGAGCTGCACTGC	442 (0.003936%)	
GCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAA	2009 (0.007155%)	
GCAAGTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCGC	655 (0.002333%)	
GCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGCGC	853 (0.003038%)	
GCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAAC CTGCGTGTGGACCCCGTGAACTTCAAGTT	405 (0.003606%)	
GCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCA GCCATGCCTGTGTACCATCAATAAAAAAT	373 (0.003321%)	
GCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGG	234 (0.000833%)	
GCACTGGTTGAAGCTGCCAACCACGTCGATGACATTGCTG	788 (0.002806%)	
GCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGC	5042 (0.017957%)	
GCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCAC CGGCCTCTGGGGCAAGGTCAACGTGGCCG	287 (0.002555%)	
GCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGATGACA	1322 (0.004708%)	

GCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTG	333 (0.001186%)	
GCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGC	1176 (0.004188%)	
GCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAG	845 (0.003010%)	
GCCAACCACGTCGATGACATTGCTGGTGCCCTCTCCAAGC	538 (0.001916%)	
GCCAACCACGTTGATGACATTGCTGGTGCCCTCTCCAAGC	486 (0.001731%)	
GCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAG GATGTTCACCACCTACCCCCAGACCAAGA	4003 (0.035642%)	
GCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAG	2326 (0.008284%)	
GCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACG	2276 (0.008106%)	
GCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGG CACTGTGCTGACTGCCAAGTACCGTTAAG	5829 (0.051901%)	
GCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTC CTGTCGCAGTGCTTGCAGGTGGTGCTGGC	1428 (0.012715%)	
GCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCA	3069 (0.010930%)	
GCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCG TGTGGACCCCGTGAACTTCAAGTTCCTGT	1140 (0.010150%)	
GCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGA	407 (0.001450%)	
GCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTG TCTGAGCTCAGCAACCTGCACGCCTACAA	963 (0.008574%)	
GCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAG	3202 (0.011404%)	
GCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTT CTCCCAGCTGTCCGAGCTGCACTGCGACA	213 (0.001897%)	
GCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTG	2022 (0.007201%)	
GCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGA GAAGCAGCTCATCACCGGCCTCTGGGGCA	2323 (0.020684%)	
GCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCC TCTGGGGCAAGGTCAACGTGGCCGAGTGC	924 (0.008227%)	
GCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGA TGAGCTGTCAGCCATGCCTGTGTACCATC	2066 (0.018395%)	
GCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCC	442 (0.001574%)	
GCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGG TCAGTGCTTCCTGGTGGTGGTGGCCACTC	2804 (0.024966%)	
GCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGC CTACAACCTGCGTGTGGACCCCGTGAACT	1128 (0.010044%)	
GCCCTGTGGAGGATGTTCCACTCCTACCCCCCGACCAAGA	1135 (0.004042%)	
GCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGC CCTGGAGAGGATGTTCACCACCTACCCCC	395 (0.003517%)	
GCCGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAA ATCGGCGGCCAGGCCGAGGAATATGGCGC	9222 (0.082111%)	
GCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGT	490 (0.001745%)	
GCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGA	1296 (0.004616%)	
GCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAA CTTCGGGAACCTGTCCAGCGCCACGGCCA	1680 (0.014958%)	
GCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGG	2641 (0.009406%)	
GCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGA CGCCCTGGAGAGGATGTTCACCACCTACC	532 (0.004737%)	
GCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGC	7751 (0.027606%)	
GCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAAT	452 (0.001610%)	

GCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCA	17594 (0.062662%)	
GCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCACCCTG	65 (0.000232%)	
GCCGTAATCATGCTAATCTTCATCATCTGAGAAGCCTTCG	1029 (0.003665%)	
GCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGC CTGTGTACCATCAATAAAAAATACTCTTG	326 (0.002903%)	
GCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGG	6136 (0.021854%)	
GCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTG CTGGCTGAGAAGTACAGATGAGCTGTCAG	856 (0.007622%)	
GCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAACTAA	228 (0.000812%)	
GCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTG TCCAGCGCCACGGCCATCGTCGGCAACCC	407 (0.003624%)	
GCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCA	579 (0.002062%)	
GCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGG CCTCTGGGGCAAGGTCAACGTGGCCGAGT	299 (0.002662%)	
GCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGAT	530 (0.001888%)	
GCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAA	529 (0.001884%)	
GCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCACCC	721 (0.002568%)	
GCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAGAAAA	1053 (0.003750%)	
GCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAAC CTGTCCAGCGCCACGGCCATCGTCGGCAA	298 (0.002653%)	
GCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGG AACCTGTCCAGCGCCACGGCCATCGTCGG	882 (0.007853%)	
GCGTCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTA	616 (0.002194%)	
GCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGTCGCCG	481 (0.001713%)	
GCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGC	711 (0.002532%)	
GCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAA	4671 (0.016636%)	
GCTAATCTTCATCATCTGAGAAGCCTTCGCATCAAAACGC	665 (0.002368%)	
GCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGC CAGCGTGCTGGCTGAGAAGTACAGATGAG	487 (0.004336%)	
GCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCAC	945 (0.003366%)	
GCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCC TGGTGGTGGTGGCCACTCGCAACCCCTCT	1075 (0.009572%)	
GCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGA TCGTCTACCCCTGGACCCAGAGGTTCTTC	1105 (0.009839%)	
GCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCC	1871 (0.006664%)	
GCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGG CTGCCTGGCAGAAGCTGGTGCGTGTGGTT	332 (0.002956%)	
GCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGC	1567 (0.005581%)	
GCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGT	942 (0.003355%)	
GCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGT	823 (0.002931%)	
GCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGT ACCGTTAAGCCGTGTACCGTGGTCAGAGC	2399 (0.021360%)	
GCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTC	2272 (0.008092%)	
GCTGCACTGGTTGAAGCTGCCAACCACGTCGATGACATTG	1397 (0.004975%)	

GCTGCCAACCACGTCGATGACATTGCTGGTGCCCTCTCCA	343 (0.001222%)	
GCTGCCAACCACGTTGATGACATTGCTGGTGCCCTCTCCA	379 (0.001350%)	
GCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCA CGCCTACAACCTGCGTGTGGACCCCGTGA	1264 (0.011254%)	
GCTGCCGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGC AAAATCGGCGGCCAGGCCGAGGAATATGG	20809 (0.185280%)	
GCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTC	12568 (0.044761%)	
GCTGGACCCAACACACCACCAGCCCTCCGACAGCGAGCAG	415 (0.001478%)	
GCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTG	4383 (0.015610%)	
GCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCG TGGCCAGCGTGCTGGCTGAGAAGTACAGA	4013 (0.035731%)	
GCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAAC	1615 (0.005752%)	
GCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTT CCCTGGACAAGTTCCTGTGTGCCGTGGGC	1425 (0.012688%)	
GCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACT GCTGGGTCAGTGCTTCCTGGTGGTGGTGG	550 (0.004897%)	
GCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTAC	2438 (0.008683%)	
GCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCC	744 (0.002650%)	
GCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATG GCGCCGACGCCCTGGAGAGGATGTTCACC	605 (0.005387%)	
GCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGC	2170 (0.007729%)	
GCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCG TGGTCAGAGCTGGACCCAACACACCACCA	1810 (0.016116%)	
GCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAG TTCCTGTGTGCCGTGGGCACTGTGCTGAC	4754 (0.042329%)	
GCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTA	841 (0.002995%)	
GGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGA	2042 (0.007273%)	
GGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAA	2554 (0.009096%)	
GGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGA	7415 (0.026409%)	
GGAAAGAGTGTAGATCTCGGTGGTCGCCGTATCATTAAAA	229 (0.000816%)	
GGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGG	2003 (0.007134%)	
GGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGG	4785 (0.017042%)	
GGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAA	287 (0.001022%)	
GGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCC	4485 (0.015974%)	
GGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACC TCCTTCGGGGAGGCCGTCAAGAACCTGGA	1341 (0.011940%)	
GGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGTGG	932 (0.003319%)	
GGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCA	1407 (0.005011%)	
GGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCC	1901 (0.006770%)	
GGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGA GCTGGACCCAACACACCACCAGCCCTCCG	1266 (0.011272%)	
GGACCCAACACACCACCAGCCCTCCGACAGCGAGCAGTCA	29 (0.000103%)	
GGACCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTC	350 (0.001247%)	

GGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGT ACAGCCCCGAGGTGCACTCTGCCGTCGAC	112 (0.000997%)	
GGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTG	719 (0.002561%)	
GGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTG	5572 (0.019845%)	
GGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAGAAGGA	440 (0.001567%)	
GGAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGAC AGCCGAGGAGAAGCAGCTCATCACCGGCC	1390 (0.012376%)	
GGAGCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTG	319 (0.001136%)	
GGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCC	1341 (0.004776%)	
GGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAA	153 (0.000545%)	
GGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCAC	476 (0.001695%)	
GGAGGATGTTCCACTCCTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGAC CAGATCCGTGGCCATGGCAAGAAAGTGGT	24748 (0.220353%)	
GGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGA AGTACAGATGAGCTGTCAGCCATGCCTGT	4473 (0.039827%)	
GGATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAA	20555 (0.073208%)	
GGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCA	4019 (0.014314%)	
GGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGA CAGCATCAAGAACACCTTCTCCCAGCTGT	899 (0.008005%)	
GGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGA GCTCAGCAACCTGCACGCCTACAACCTGC	340 (0.003027%)	
GGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCA GCTGTCCGAGCTGCACTGCGACAAGCTGC	651 (0.005796%)	
GGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACC	1899 (0.006763%)	
GGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGA	1044 (0.003718%)	
GGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAA CCTGCGTGTGGACCCCGTGAACTTCAAGT	680 (0.006055%)	
GGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCG	5013 (0.017854%)	
GGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGATGAC	3117 (0.011101%)	
GGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCT	335 (0.001193%)	
GGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGG GCACTGTGCTGACTGCCAAGTACCGTTAA	2522 (0.022456%)	
GGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAG	846 (0.003013%)	
GGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCA AGAACCTGGACAGCATCAAGAACACCTTC	566 (0.005040%)	
GGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCT GTCTGAGCTCAGCAACCTGCACGCCTACA	467 (0.004158%)	
GGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGTCCGGC	858 (0.003056%)	
GGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGC	996 (0.003547%)	
GGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGACCAAG	330 (0.001175%)	
GGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCA ACTTCGGGAACCTGTCCAGCGCCACGGCC	1566 (0.013943%)	
GGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAG	7155 (0.025483%)	
GGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAA	431 (0.001535%)	
GGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCA	1797 (0.016000%)	

CCTACCCCCAGACCAAGACCTACTTCCCC		
GGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACC	361 (0.003214%)	
GGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGA	508 (0.001809%)	
GGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCA	1002 (0.008922%)	
GGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCAC	1335 (0.004755%)	
GGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGA	1140 (0.010150%)	
GGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCA	3477 (0.012383%)	
GGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGT	1281 (0.011406%)	
GGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAG	1341 (0.004776%)	
GGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACC	264 (0.002351%)	
GGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTG	2423 (0.021574%)	
GGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCT	6754 (0.024055%)	
GGGAAAGAGTGTAGATCTCGGTGGTCGCCGTATCATTAAA	285 (0.001015%)	
GGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGG	2383 (0.008487%)	
GGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCA	454 (0.001617%)	
GGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGG	290 (0.002582%)	
GGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGC	1944 (0.006924%)	
GGGAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGC	2453 (0.021841%)	
GGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAG	1101 (0.009803%)	
GGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGG	324 (0.001154%)	
GGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCA	2121 (0.007554%)	
GGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAG	1408 (0.005015%)	
GGGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGA	565 (0.002012%)	
GGGGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGG	342 (0.001218%)	
GGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCAT	174 (0.001549%)	
GGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCT	175 (0.000623%)	
GGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCC	501 (0.001784%)	
GGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACT	409 (0.003642%)	
GGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGC	2663 (0.009484%)	
GGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCAC	2275 (0.020256%)	
GGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATG	117 (0.001042%)	
GGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTT	270 (0.000962%)	
GGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTG	441 (0.001571%)	
GGTCAGAGCTGGACCCAACACACCACCAGCCCTCCGACAG	177 (0.000630%)	

GGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCT	894 (0.003184%)	
GGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTG	787 (0.007007%)	
GGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGC	1172 (0.004174%)	
GGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACAC	844 (0.007515%)	
GGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACT	2088 (0.007437%)	
GGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGC	1865 (0.016606%)	
GGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGG	1086 (0.009670%)	
GGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCA	482 (0.001717%)	
GGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACG	374 (0.003330%)	
GGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCAC	1879 (0.016730%)	
GGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAATAAAA	560 (0.004986%)	
GGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCA	300 (0.002671%)	
GGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCAC	1396 (0.004972%)	
GGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAG	526 (0.001873%)	
GGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTC	424 (0.003775%)	
GGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGAT	825 (0.002938%)	
GGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGT	3469 (0.030887%)	
GGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCC	2843 (0.025314%)	
GGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCC	555 (0.001977%)	
GGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTAC	306 (0.002725%)	
GGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAG	147 (0.001309%)	
GGTTCACTCATCTCCCTCACAGCCGTAATCATGCTAATCT	408 (0.001453%)	
GGTTGAAGCTGCCAACCACGTCGATGACATTGCTGGTGCC	518 (0.001845%)	
GGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCA	1764 (0.006283%)	
GGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCGCCCTAGCCATTTGCACCCTAGTCTTATACC	245 (0.002181%)	
GTAAACCTAACCTTCTTCCCCCAACACTTCCTAGGCCTAG	390 (0.001389%)	
GTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGC	361 (0.003214%)	
GTAATCATGCTAATCTTCATCATCTGAGAAGCCTTCGCAT	131 (0.000467%)	
GTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCGCCGCC	567 (0.002019%)	
GTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAA	187 (0.000666%)	
GTAGGGAAAGAGTGTAGATCTCGGTGGTCGCCGTATCATT	663 (0.002361%)	
GTAGGTTCACTCATCTCCCTCACAGCCGTAATCATGCTAA	321 (0.001143%)	
GTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGG	14843 (0.052864%)	

GTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCC	34422 (0.306489%)	
GTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGGCTCCTGGGTG	1119 (0.009963%)	
GTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCAGACCAAGACCTACT	2116 (0.018841%)	
GTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTG	949 (0.003380%)	
GTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGC	2506 (0.008925%)	
GTCAGAGCTGGACCCAACACACCACCAGCCCTCCGACAGC	170 (0.000605%)	
GTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTC	3708 (0.013206%)	
GTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGT	3394 (0.030220%)	
GTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCA	2961 (0.010546%)	
GTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACA	2552 (0.022723%)	
GTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAA	3215 (0.011450%)	
GTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAG	1425 (0.005075%)	
GTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACC	400 (0.003562%)	
GTCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAAC	829 (0.002953%)	
GTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGGTTGCCCACGCTCTGGCCCGCAAGTACC	3555 (0.031653%)	
GTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACC	3134 (0.011162%)	
GTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGT	1781 (0.006343%)	
GTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGC	2182 (0.007771%)	
GTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCA	456 (0.001624%)	
GTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGT	1417 (0.012617%)	
GTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCA	1810 (0.016116%)	
GTCGTGTAGGGAAAGAGTGTAGATCTCGGTGGTCGCCGTA	481 (0.001713%)	
GTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGG	2219 (0.019758%)	
GTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCG	539 (0.001920%)	
GTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGA	2113 (0.018814%)	
GTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAA	3372 (0.012010%)	
GTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGC	3074 (0.027370%)	
GTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACT	973 (0.008663%)	
GTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAATAAAAA	1335 (0.011887%)	
GTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCAC	231 (0.002057%)	
GTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTC	215 (0.001914%)	
GTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACT	2420 (0.008619%)	
GTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGG	2094 (0.007458%)	

GTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGC CGTGGCCAGCGTGCTGGCTGAGAAGTACA	39004 (0.347286%)	
GTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATA TGGCGCCGACGCCCTGGAGAGGATGTTCA	2075 (0.018476%)	
GTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACA AGTTCCTGTGTGCCGTGGGCACTGTGCTG	5805 (0.051687%)	
GTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAG	2294 (0.008170%)	
GTGGACCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGG	68721 (0.244753%)	
GTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGA GTACAGCCCCGAGGTGCACTCTGCCGTCG	804 (0.007159%)	
GTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCC	1500 (0.005342%)	
GTGGAGGATGTTCCACTCCTACCCCCCGACCAAGACCTAC	363 (0.001293%)	
GTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGATG	601 (0.002140%)	
GTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGT GGGCACTGTGCTGACTGCCAAGTACCGTT	3322 (0.029579%)	
GTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCT CTGTCTGAGCTCAGCAACCTGCACGCCTA	556 (0.004951%)	
GTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCT GCACGCCTACAACCTGCGTGTGGACCCCG	1177 (0.010480%)	
GTGGTCAGAGCTGGACCCAACACACCACCAGCCCTCCGAC	80959 (0.288339%)	
GTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCG	709 (0.002525%)	
GTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGC CGTGGGCACTGTGCTGACTGCCAAGTACC	756 (0.006731%)	
GTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAA CCTGCACGCCTACAACCTGCGTGTGGACC	907 (0.008076%)	
GTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTG TGCCGTGGGCACTGTGCTGACTGCCAAGT	941 (0.008379%)	
GTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAG	1705 (0.006072%)	
GTGTAGGGAAAGAGTGTAGATCTCGGTGGTCGCCGTATCA	351 (0.001250%)	
GTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTT	1117 (0.003978%)	
GTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGG	15064 (0.053651%)	
GTTCACCACCTACCCCCAGACCAAGACCTACTTCCCCCAC	1844 (0.006567%)	
GTTCACTCATCTCCCTCACAGCCGTAATCATGCTAATCTT	532 (0.001895%)	
GTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAG CTCATCACCGGCCTCTGGGGCAAGGTCAA	3870 (0.034458%)	
GTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGC	2782 (0.009908%)	
GTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTAC	3698 (0.013171%)	
GTTGAAGCTGCCAACCACGTCGATGACATTGCTGGTGCCC	1862 (0.006632%)	
GTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACC	3325 (0.011842%)	
GTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAA	5419 (0.019300%)	
GTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCGCC CTAGCCATTTGCACCCTAGTCTTATACCT	895 (0.007969%)	
GTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAGGA	1855 (0.006607%)	
GTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	4374 (0.015578%)	

TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	12653 (0.045064%)	
TAAACCTAACCTTCTTCCCCCAACACTTCCTAGGCCTAGC	66 (0.000235%)	
TAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTG AGAAGTACAGATGAGCTGTCAGCCATGCC	101 (0.000899%)	
TAATCATGCTAATCTTCATCATCTGAGAAGCCTTCGCATC	90 (0.000321%)	
TAATCTTCATCATCTGAGAAGCCTTCGCATCAAAACGCAA	136 (0.000484%)	
TACAATTGGGAAAAATGAAAATAGAAAAAAAGAAAATAGA	29128 (0.103741%)	
TACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGG CAAGAAGGTGGCAGCTGCACTGGTTGAAG	55 (0.000490%)	
TACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGG CAAGAAAGTGGTGGCTGCCCTGGGCAATG	57 (0.000508%)	
TACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCC CAAGGTGCAAGCCCACGGCAAGAAGGTGC	257 (0.002288%)	
TACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCA GCGTGCTGGCTGAGAAGTACAGATGAGCT	138 (0.001229%)	
TACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGC ACTGGTTGAAGCTGCCAACCACGTTGATG	170 (0.001514%)	
TAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAAG	115 (0.000410%)	
TAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAA	38 (0.000135%)	
TAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAA	15 (0.000053%)	
TAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAA	39 (0.000139%)	
TAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGATT	186 (0.000662%)	
TAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGATTT	235 (0.000837%)	
TAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGA	651 (0.002319%)	
TAGAATATAGAAAAAAATAAAGAAGAAAATTGGAAAATAG	129 (0.000459%)	
TAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAGA	205 (0.000730%)	
TAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAA	725 (0.002582%)	
TAGGGAAAGAGTGTAGATCTCGGTGGTCGCCGTATCATTA	254 (0.000905%)	
TAGGTTCACTCATCTCCCTCACAGCCGTAATCATGCTAAT	45 (0.000160%)	
TAGGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTC GCCCTAGCCATTTGCACCCTAGTCTTATA	234 (0.002084%)	
TATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGA	148 (0.000527%)	
TCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCAC	690 (0.002457%)	
TCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTC CACGCTTCCCTGGACAAGTTCCTGTGTGC	562 (0.005004%)	
TCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAA	163 (0.000581%)	
TCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGT	550 (0.001959%)	
TCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCA GAGGTCCACGCTTCCCTGGACAAGTTCCT	431 (0.003838%)	
TCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTG GACCCCGTGAACTTCAAGTTCCTGTCGCA	553 (0.004924%)	
TCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTG GACCCCGAGAACTTCAGGCTCCTGGGTGA	360 (0.003205%)	
TCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTC ACCACCTACCCCCAGACCAAGACCTACTT	124 (0.001104%)	

TCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGA	233 (0.000830%)	
TCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTAC	95277 (0.339333%)	
TCACAGCCGTAATCATGCTAATCTTCATCATCTGAGAAGC	97 (0.000345%)	
TCACCACCTACCCCCAGACCAAGACCTACTTCCCCCACTT	1458 (0.005193%)	
TCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTC TACCCCTGGACCCAGAGGTTCTTCGCCAA	116 (0.001033%)	
TCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCC	134 (0.000477%)	
TCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCG	1312 (0.004673%)	
TCAGAGCTGGACCCAACACACCACCAGCCCTCCGACAGCG	50 (0.000178%)	
TCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGC GGCCAGGCCGAGGAATATGGCGCCGACGC	917 (0.008165%)	
TCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAG TTCCTGTCGCAGTGCTTGCAGGTGGTGCT	70 (0.000623%)	
TCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGC	2575 (0.009171%)	
TCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGC CAGGCTGCCTGGCAGAAGCTGGTGCGTGT	1653 (0.014718%)	
TCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTG	207 (0.000737%)	
TCAGTAGGTTCACTCATCTCCCTCACAGCCGTAATCATGC	23280 (0.082913%)	
TCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTG GTGGTGGTGGCCACTCGCAACCCCTCTCT	74 (0.000659%)	
TCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCT	309 (0.001101%)	
TCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGG ACAAGTTCCTGTGTGCCGTGGGCACTGTG	224 (0.001994%)	
TCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATC GTCTACCCCTGGACCCAGAGGTTCTTCGC	1660 (0.014780%)	
TCATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATC	145 (0.000516%)	
TCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCA	124 (0.000442%)	
TCATGCTAATCTTCATCATCTGAGAAGCCTTCGCATCAAA	116 (0.000413%)	
TCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAG GAATATGGCGCCGACGCCCTGGAGAGGAT	810 (0.007212%)	
TCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTG CTTCCTGGTGGTGGTGGCCACTCGCAACC	746 (0.006642%)	
TCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCAC	858 (0.003056%)	
TCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTG TACCGTGGTCAGAGCTGGACCCAACACAC	688 (0.006126%)	
TCCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGGGCG CCGAGGAGGAAATCGGAGCCGAGGCCCTG	335 (0.002983%)	
TCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAG	3092 (0.011012%)	
TCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGG	175 (0.000623%)	
TCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTG	7016 (0.024988%)	
TCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGA	245 (0.000873%)	
TCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGG TCAGAGCTGGACCCAACACACCACCAGCC	100 (0.000890%)	
TCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGA	139 (0.000495%)	
TCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCAT CACCGGCCTCTGGGGCAAGGTCAACGTGG	452 (0.004025%)	

TCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGC CGACGCCCTGGAGAGGATGTTCACCACCT	88 (0.000784%)	
TCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACC	930 (0.003312%)	
TCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAG GCTCTGTCTGAGCTCAGCAACCTGCACGC	661 (0.005885%)	
TCCTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCA TGGCAAGAAAGTGGTGGCTGCCCTGGGCA	9155 (0.081515%)	
TCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCT CATCACCGGCCTCTGGGGCAAGGTCAACG	389 (0.003464%)	
TCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTT	661 (0.002354%)	
TCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCT GCCTGGCAGAAGCTGGTGCGTGTGGTTGC	405 (0.003606%)	
TCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTT	1302 (0.004637%)	
TCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTC CTGTGTGCCGTGGGCACTGTGCTGACTGC	757 (0.006740%)	
TCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCT	633 (0.002254%)	
TCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCG	407 (0.001450%)	
TCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTG CGACAAGCTGCACGTGGACCCCGAGAACT	25 (0.000223%)	
TCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGG	1814 (0.006461%)	
TCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCT GCCAACCACGTTGATGACATTGCTGGTGC	49 (0.000436%)	
TCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCT	1180 (0.004203%)	
TCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTG TGCTGACTGCCAAGTACCGTTAAGCCGTG	1347 (0.011994%)	
TCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTA	292 (0.001040%)	
TCGGAAGAGCGTCGTGTAGGGAAAGAGTGTAGATCTCGGT	822 (0.002928%)	
TCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCC	1486 (0.005292%)	
TCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCT	323 (0.001150%)	
TCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCA	1774 (0.006318%)	
TCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCAT	509 (0.001813%)	
TCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCC	578 (0.002059%)	
TCGGGAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTG GACAGCCGAGGAGAAGCAGCTCATCACCG	3410 (0.030362%)	
TCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGT GTGGTTGCCCACGCTCTGGCCCGCAAGTA	125 (0.001113%)	
TCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGT	305 (0.001086%)	
TCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTG CGTGTGGTTGCCCACGCTCTGGCCCGCAA	363 (0.003232%)	
TCGTGTAGGGAAAGAGTGTAGATCTCGGTGGTCGCCGTAT	351 (0.001250%)	
TCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAAC CCCAAGGTGCAAGCCCACGGCAAGAAGGT	646 (0.005752%)	
TCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGA	261 (0.000930%)	
TCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAG TGCTTCCTGGTGGTGGTGGCCACTCGCAA	196 (0.001745%)	
TCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGT	4565 (0.016258%)	
TCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGC CAAGTACCGTTAAGCCGTGTACCGTGGTC	876 (0.007800%)	

TCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCC	149 (0.000531%)	
TCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCA TGCCTGTGTACCATCAATAAAAAATACTC	366 (0.003259%)	
TCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTG	360 (0.001282%)	
TCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCA AGTACCGTTAAGCCGTGTACCGTGGTCAG	252 (0.002244%)	
TCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGTCC	671 (0.002390%)	
TCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCC	631 (0.002247%)	
TCTTAACTGTCTCTTACAGGCAATCGGTGAAATTGATCTCCCTGTGCAAAAGCAGGGATAATCCCATAAGA CGAGAAGACCCTGTGGAACTTTAAAACCA	8490 (0.075594%)	
TCTTCATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGC	616 (0.002194%)	
TCTTCCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGG GCGCCGAGGAGGAAATCGGAGCCGAGGCC	212 (0.001888%)	
TGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTT	789 (0.002810%)	
TGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGC	410 (0.001460%)	
TGAAGCTGCCAACCACGTCGATGACATTGCTGGTGCCCTC	194 (0.000691%)	
TGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGC	2267 (0.008074%)	
TGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGG CCGAGGAATATGGCGCCGACGCCCTGGAG	416 (0.003704%)	
TGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAG	439 (0.001564%)	
TGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGC AGAAGCTGGTGCGTGTGGTTGCCCACGCT	338 (0.003010%)	
TGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACT TCAAACTGCTGGGTCAGTGCTTCCTGGTG	38954 (0.346841%)	
TGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTAC CGTTAAGCCGTGTACCGTGGTCAGAGCTG	779 (0.006936%)	
TGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAG	838 (0.002985%)	
TGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGA	82 (0.000292%)	
TGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAA	61 (0.000217%)	
TGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTC	302 (0.001076%)	
TGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTC	1504 (0.005357%)	
TGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAAC ACCTTCTCCCAGCTGTCCGAGCTGCACTG	1344 (0.011967%)	
TGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTC AGCCATGCCTGTGTACCATCAATAAAAAA	151 (0.001344%)	
TGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAG	639 (0.002276%)	
TGCACTGGTTGAAGCTGCCAACCACGTCGATGACATTGCT	814 (0.002899%)	
TGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAG	1682 (0.005991%)	
TGCCAACCACGTCGATGACATTGCTGGTGCCCTCTCCAAG	574 (0.002044%)	
TGCCAACCACGTTGATGACATTGCTGGTGCCCTCTCCAAG	865 (0.003081%)	
TGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCC	1887 (0.006721%)	
TGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGC GTGTGGACCCCGTGAACTTCAAGTTCCTG	361 (0.003214%)	
TGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACA	3398 (0.012102%)	

TGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGG GTCAGTGCTTCCTGGTGGTGGTGGCCACT	93 (0.000828%)	
TGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACG CCTACAACCTGCGTGTGGACCCCGTGAAC	96 (0.000855%)	
TGCCGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAA AATCGGCGGCCAGGCCGAGGAATATGGCG	5048 (0.044947%)	
TGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATG CCTGTGTACCATCAATAAAAAATACTCTT	88 (0.000784%)	
TGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTG	3289 (0.011714%)	
TGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGG GAACCTGTCCAGCGCCACGGCCATCGTCG	205 (0.001825%)	
TGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGT AAGGAGTACAGCCCCGAGGTGCACTCTGC	20920 (0.186269%)	
TGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTG	115994 (0.413118%)	
TGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTA	5382 (0.019168%)	
TGCTAATCTTCATCATCTGAGAAGCCTTCGCATCAAAACG	1441 (0.005132%)	
TGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCA	401 (0.001428%)	
TGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAG TACCGTTAAGCCGTGTACCGTGGTCAGAG	1512 (0.013463%)	
TGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGT	777 (0.002767%)	
TGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCC GTGGCCAGCGTGCTGGCTGAGAAGTACAG	672 (0.005983%)	
TGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAA	2155 (0.007675%)	
TGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCT TCCCTGGACAAGTTCCTGTGTGCCGTGGG	1880 (0.016739%)	
TGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAA	2908 (0.010357%)	
TGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAAC TGCTGGGTCAGTGCTTCCTGGTGGTGGTG	1762 (0.015689%)	
TGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATAT GGCGCCGACGCCCTGGAGAGGATGTTCAC	393 (0.003499%)	
TGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAA GTTCCTGTGTGCCGTGGGCACTGTGCTGA	3892 (0.034654%)	
TGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGT	1251 (0.004455%)	
TGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGC	824 (0.002935%)	
TGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAG AGCTGGACCCAACACACCACCAGCCCTCC	505 (0.004496%)	
TGGACCCAACACACCACCAGCCCTCCGACAGCGAGCAGTC	39 (0.000139%)	
TGGACCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGT	1706 (0.006076%)	
TGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAG TACAGCCCCGAGGTGCACTCTGCCGTCGA	191 (0.001701%)	
TGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCT	327 (0.001165%)	
TGGAGGATGTTCCACTCCTACCCCCCGACCAAGACCTACT	217 (0.000773%)	
TGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTG AGCTCAGCAACCTGCACGCCTACAACCTG	1526 (0.013587%)	
TGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCC	9973 (0.035519%)	
TGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGATGA	147 (0.000524%)	
TGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTG GGCACTGTGCTGACTGCCAAGTACCGTTA	1652 (0.014709%)	
TGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTC TGTCTGAGCTCAGCAACCTGCACGCCTAC	101 (0.000899%)	

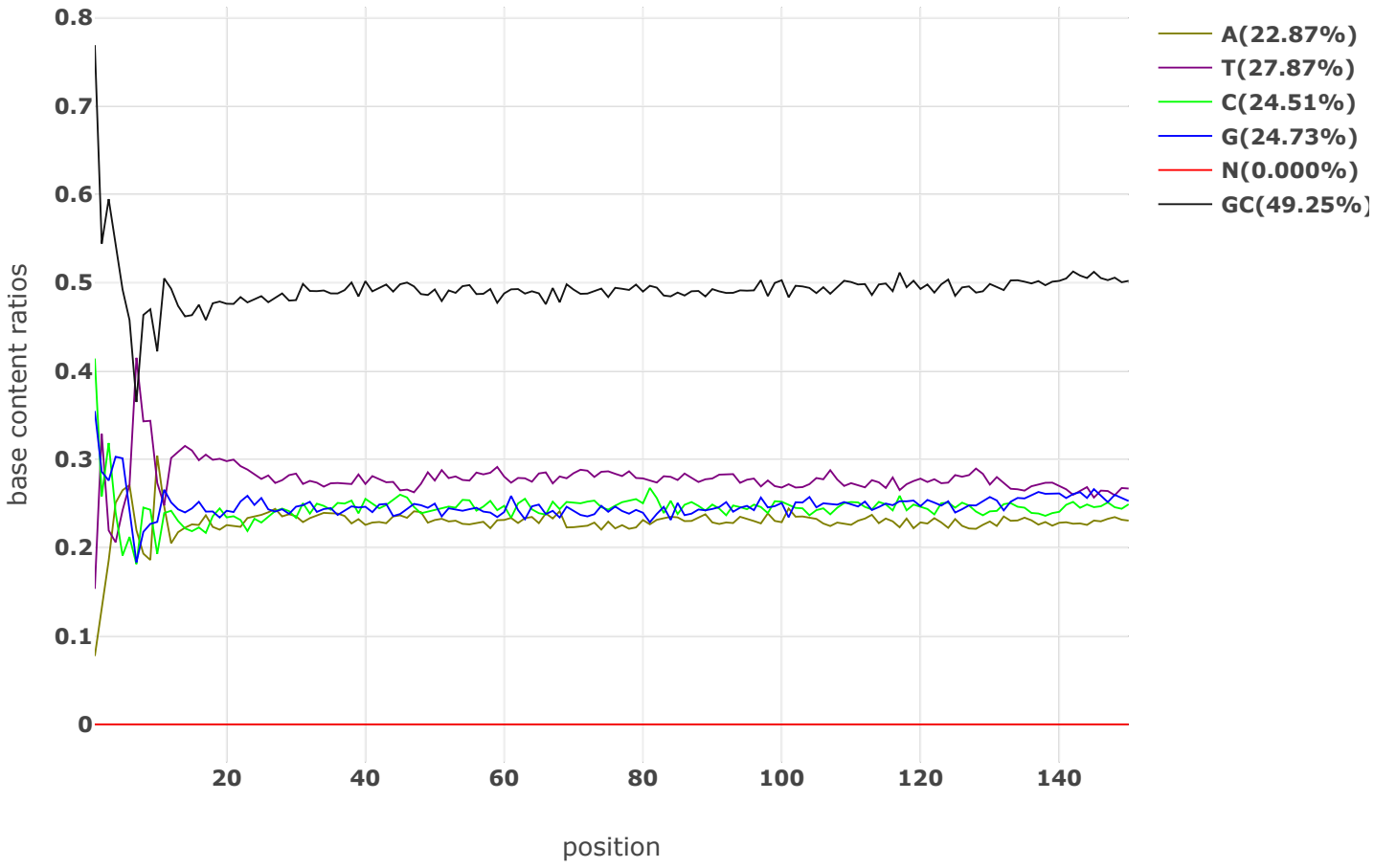
TGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGTCCGG	1403 (0.004997%)	
TGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGG	1127 (0.004014%)	
TGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCC AACTTCGGGAACCTGTCCAGCGCCACGGC	20674 (0.184078%)	
TGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCA	11739 (0.041809%)	
TGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCA	2013 (0.007169%)	
TGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTG GCCAGCGTGCTGGCTGAGAAGTACAGATG	1703 (0.015163%)	
TGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTG CACGCCTACAACCTGCGTGTGGACCCCGT	843 (0.007506%)	
TGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTAC AACCTGCGTGTGGACCCCGTGAACTTCAA	392 (0.003490%)	
TGGGGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTG	84042 (0.299319%)	
TGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTG GCTGAGAAGTACAGATGAGCTGTCAGCCA	199 (0.001772%)	
TGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCC	332 (0.001182%)	
TGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCC CTGGACAAGTTCCTGTGTGCCGTGGGCAC	238 (0.002119%)	
TGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGG	442 (0.001574%)	
TGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCC TGGCAGAAGCTGGTGCGTGTGGTTGCCCA	333 (0.002965%)	
TGGTCAGAGCTGGACCCAACACACCACCAGCCCTCCGACA	63 (0.000224%)	
TGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCAC	2761 (0.009833%)	
TGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTG GTGCGTGTGGTTGCCCACGCTCTGGCCCG	2545 (0.022660%)	
TGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGC TGGGTCAGTGCTTCCTGGTGGTGGTGGCC	368 (0.003277%)	
TGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCA	2713 (0.009662%)	
TGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGA	253 (0.000901%)	
TGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAA TATGGCGCCGACGCCCTGGAGAGGATGTT	2148 (0.019125%)	
TGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCC GTGGGCACTGTGCTGACTGCCAAGTACCG	113 (0.001006%)	
TGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAAC CTGCACGCCTACAACCTGCGTGTGGACCC	129 (0.001149%)	
TGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGT GCCGTGGGCACTGTGCTGACTGCCAAGTA	247 (0.002199%)	
TGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTG TGTGCCGTGGGCACTGTGCTGACTGCCAA	740 (0.006589%)	
TGGTTGAAGCTGCCAACCACGTCGATGACATTGCTGGTGC	248 (0.000883%)	
TGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGC	1409 (0.005018%)	
TGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGA	204 (0.000727%)	
TGTAGGGAAAGAGTGTAGATCTCGGTGGTCGCCGTATCAT	279 (0.000994%)	
TGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTG	3617 (0.012882%)	
TGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGA	266 (0.000947%)	
TGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGC GCCGACGCCCTGGAGAGGATGTTCACCAC	150 (0.001336%)	
TGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGG	908 (0.003234%)	

TGTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGG AGTACAGCCCCGAGGTGCACTCTGCCGTC	2029 (0.018066%)	
TGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTC	2165 (0.007711%)	
TGTGGAGGATGTTCCACTCCTACCCCCCGACCAAGACCTA	553 (0.001970%)	
TGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGA	2253 (0.008024%)	
TGTTCACCACCTACCCCCAGACCAAGACCTACTTCCCCCA	1158 (0.004124%)	
TTAACTGTCTCTTACAGGCAATCGGTGAAATTGATCTCCCTGTGCAAAAGCAGGGATAATCCCATAAGACG AGAAGACCCTGTGGAACTTTAAAACCAGC	45 (0.000401%)	
TTAGAATATAGAAAAAAATAAAGAAGAAAATTGGAAAATA	717 (0.002554%)	
TTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAG	232 (0.000826%)	
TTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAG	160 (0.000570%)	
TTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCA	1364 (0.004858%)	
TTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGT CCACGCTTCCCTGGACAAGTTCCTGTGTG	1168 (0.010400%)	
TTCACCACCTACCCCCAGACCAAGACCTACTTCCCCCACT	579 (0.002062%)	
TTCACTCATCTCCCTCACAGCCGTAATCATGCTAATCTTC	85 (0.000303%)	
TTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGC	1514 (0.005392%)	
TTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCG	5102 (0.018171%)	
TTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTG CCAGGCTGCCTGGCAGAAGCTGGTGCGTG	1513 (0.013472%)	
TTCATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCAT	135 (0.000481%)	
TTCCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGGGC GCCGAGGAGGAAATCGGAGCCGAGGCCCT	867 (0.007720%)	
TTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTG	241 (0.000858%)	
TTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTG GTCAGAGCTGGACCCAACACACCACCAGC	108 (0.000962%)	
TTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGC TCATCACCGGCCTCTGGGGCAAGGTCAAC	842 (0.007497%)	
TTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTT CCTGTGTGCCGTGGGCACTGTGCTGACTG	1126 (0.010026%)	
TTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCC	686 (0.002443%)	
TTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACC	3032 (0.010799%)	
TTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACG	1233 (0.004391%)	
TTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGC TGCCAACCACGTTGATGACATTGCTGGTG	121 (0.001077%)	
TTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGC	3348 (0.011924%)	
TTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACC	329 (0.001172%)	
TTCGGGAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGT GGACAGCCGAGGAGAAGCAGCTCATCACC	18894 (0.168230%)	
TTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGA CAAGCTGCACGTGGACCCCGAGAACTTCA	901 (0.008022%)	
TTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAG	461 (0.001642%)	
TTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTT	68 (0.000242%)	
TTGAAGCTGCCAACCACGTCGATGACATTGCTGGTGCCCT	118 (0.000420%)	
TTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGT		

	100 (0.000356%)	
TTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCT	1363 (0.004854%)	
TTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACA	591 (0.002105%)	
TTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAAC	3215 (0.011450%)	
TTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCA	2928 (0.010428%)	
TTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAA CTGCTGGGTCAGTGCTTCCTGGTGGTGGT	356 (0.003170%)	
TTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAG	273 (0.000972%)	
TTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAA	1216 (0.004331%)	
TTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCGCCCT AGCCATTTGCACCCTAGTCTTATACCTCC	277 (0.002466%)	
TTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAGGACTT	111 (0.000395%)	
TTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAG	210 (0.000748%)	
TTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCGCCC TAGCCATTTGCACCCTAGTCTTATACCTC	82 (0.000730%)	
TTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAGGACT	285 (0.001015%)	
TTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAA	498 (0.001774%)	
TTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAGGAC	382 (0.001361%)	
TTTTTTTTTTTTTTTTTGTTTTTTTTTTTTTTTTTTTT	205 (0.000730%)	
TTTTTTTTTTTTTTTTTTGTTTTTTTTTTTTTTTTTTT	255 (0.000908%)	
TTTTTTTTTTTTTTTTTTTGTTTTTTTTTTTTTTTTTTT	228 (0.000812%)	
TTTTTTTTTTTTTTTTTTTTGTTTTTTTTTTTTTTTTTT	220 (0.000784%)	
TTTTTTTTTTTTTTTTTTTTTGTTTTTTTTTTTTTTTTT	249 (0.000887%)	
TTTTTTTTTTTTTTTTTTTTTTGTTTTTTTTTTTTTTTT	270 (0.000962%)	
TTTTTTTTTTTTTTTTTTTTTTTGTTTTTTTTTTTTTTT	262 (0.000933%)	
TTTTTTTTTTTTTTTTTTTTTTTTGTTTTTTTTTTTTTT	279 (0.000994%)	
TTTTTTTTTTTTTTTTTTTTTTTTTGTTTTTTTTTTTTT	280 (0.000997%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTGTTTTTTTTTTTT	288 (0.001026%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTGTTTTTTTTTTT	3459 (0.012319%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTATTT	169 (0.000602%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTATT	157 (0.000559%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAT	191 (0.000680%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTA	178 (0.000634%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	161672 (0.575802%)	
TTTTTTTTTTTTTTTTTTTT

TTTT

Value of each position will be shown on mouse over.



After filtering: read1: KMER counting

Darker background means larger counts. The count will be shown on mouse over.

	AA	AT	AC	AG	TA	TT	TC	TG	CA	CT	CC	CG	GA	GT	GC	GG
AAA	AAAAA	AAAAT	AAAAC	AAAAG	AAATA	AAATT	AAATC	AAATG	AAACA	AAACT	AAACC	AAACG	AAAGA	AAAGT	AAAGC	AAAGG
AAT	AATAA	AATAT	AATAC	AATAG	AATTA	AATTT	AATTC	AATTG	AATCA	AATCT	AATCC	AATCG	AATGA	AATGT	AATGC	AATGG
AAC	AACAA	AACAT	AACAC	AACAG	AACTA	AACTT	AACTC	AACTG	AACCA	AACCT	AACCC	AACCG	AACGA	AACGT	AACGC	AACGG
AAG	AAGAA	AAGAT	AAGAC	AAGAG	AAGTA	AAGTT	AAGTC	AAGTG	AAGCA	AAGCT	AAGCC	AAGCG	AAGGA	AAGGT	AAGGC	AAGGG
ATA	ATAAA	ATAAT	ATAAC	ATAAG	ATATA	ATATT	ATATC	ATATG	ATACA	ATACT	ATACC	ATACG	ATAGA	ATAGT	ATAGC	ATAGG
ATT	ATTAA	ATTAT	ATTAC	ATTAG	ATTTA	ATTTT	ATTTC	ATTTG	ATTCA	ATTCT	ATTCC	ATTCG	ATTGA	ATTGT	ATTGC	ATTGG
ATC	ATCAA	ATCAT	ATCAC	ATCAG	ATCTA	ATCTT	ATCTC	ATCTG	ATCCA	ATCCT	ATCCC	ATCCG	ATCGA	ATCGT	ATCGC	ATCGG
ATG	ATGAA	ATGAT	ATGAC	ATGAG	ATGTA	ATGTT	ATGTC	ATGTG	ATGCA	ATGCT	ATGCC	ATGCG	ATGGA	ATGGT	ATGGC	ATGGG
ACA	ACAAA	ACAAT	ACAAC	ACAAG	ACATA	ACATT	ACATC	ACATG	ACACA	ACACT	ACACC	ACACG	ACAGA	ACAGT	ACAGC	ACAGG
ACT	ACTAA	ACTAT	ACTAC	ACTAG	ACTTA	ACTTT	ACTTC	ACTTG	ACTCA	ACTCT	ACTCC	ACTCG	ACTGA	ACTGT	ACTGC	ACTGG
ACC	ACCAA	ACCAT	ACCAC	ACCAG	ACCTA	ACCTT	ACCTC	ACCTG	ACCCA	ACCCT	ACCCC	ACCCG	ACCGA	ACCGT	ACCGC	ACCGG
ACG	ACGAA	ACGAT	ACGAC	ACGAG	ACGTA	ACGTT	ACGTC	ACGTG	ACGCA	ACGCT	ACGCC	ACGCG	ACGGA	ACGGT	ACGGC	ACGGG
AGA	AGAAA	AGAAT	AGAAC	AGAAG	AGATA	AGATT	AGATC	AGATG	AGACA	AGACT	AGACC	AGACG	AGAGA	AGAGT	AGAGC	AGAGG
AGT	AGTAA	AGTAT	AGTAC	AGTAG	AGTTA	AGTTT	AGTTC	AGTTG	AGTCA	AGTCT	AGTCC	AGTCG	AGTGA	AGTGT	AGTGC	AGTGG
AGC	AGCAA	AGCAT	AGCAC	AGCAG	AGCTA	AGCTT	AGCTC	AGCTG	AGCCA	AGCCT	AGCCC	AGCCG	AGCGA	AGCGT	AGCGC	AGCGG
AGG	AGGAA	AGGAT	AGGAC	AGGAG	AGGTA	AGGTT	AGGTC	AGGTG	AGGCA	AGGCT	AGGCC	AGGCG	AGGGA	AGGGT	AGGGC	AGGGG
TAA	TAAAA	TAAAT	TAAAC	TAAAG	TAATA	TAATT	TAATC	TAATG	TAACA	TAACT	TAACC	TAACG	TAAGA	TAAGT	TAAGC	TAAGG
TAT	TATAA	TATAT	TATAC	TATAG	TATTA	TATTT	TATTC	TATTG	TATCA	TATCT	TATCC	TATCG	TATGA	TATGT	TATGC	TATGG
TAC	TACAA	TACAT	TACAC	TACAG	TACTA	TACTT	TACTC	TACTG	TACCA	TACCT	TACCC	TACCG	TACGA	TACGT	TACGC	TACGG
TAG	TAGAA	TAGAT	TAGAC	TAGAG	TAGTA	TAGTT	TAGTC	TAGTG	TAGCA	TAGCT	TAGCC	TAGCG	TAGGA	TAGGT	TAGGC	TAGGG
TTA	TTAAA	TTAAT	TTAAC	TTAAG	TTATA	TTATT	TTATC	TTATG	TTACA	TTACT	TTACC	TTACG	TTAGA	TTAGT	TTAGC	TTAGG
TTT	TTTAA	TTTAT	TTTAC	TTTAG	TTTTA	TTTTT	TTTTC	TTTTG	TTTCA	TTTCT	TTTCC	TTTCG	TTTGA	TTTGT	TTTGC	TTTGG
TTC	TTCAA	TTCAT	TTCAC	TTCAG	TTCTA	TTCTT	TTCTC	TTCTG	TTCCA	TTCCT	TTCCC	TTCCG	TTCGA	TTCGT	TTCGC	TTCGG
TTG	TTGAA	TTGAT	TTGAC	TTGAG	TTGTA	TTGTT	TTGTC	TTGTG	TTGCA	TTGCT	TTGCC	TTGCG	TTGGA	TTGGT	TTGGC	TTGGG
TCA	TCAAA	TCAAT	TCAAC	TCAAG	TCATA	TCATT	TCATC	TCATG	TCACA	TCACT	TCACC	TCACG	TCAGA	TCAGT	TCAGC	TCAGG
TCT	TCTAA	TCTAT	TCTAC	TCTAG	TCTTA	TCTTT	TCTTC	TCTTG	TCTCA	TCTCT	TCTCC	TCTCG	TCTGA	TCTGT	TCTGC	TCTGG
TCC	TCCAA	TCCAT	TCCAC	TCCAG	TCCTA	TCCTT	TCCTC	TCCTG	TCCCA	TCCCT	TCCCC	TCCCG	TCCGA	TCCGT	TCCGC	TCCGG
TCG	TCGAA	TCGAT	TCGAC	TCGAG	TCGTA	TCGTT	TCGTC	TCGTG	TCGCA	TCGCT	TCGCC	TCGCG	TCGGA	TCGGT	TCGGC	TCGGG
TGA	TGAAA	TGAAT	TGAAC	TGAAG	TGATA	TGATT	TGATC	TGATG	TGACA	TGACT	TGACC	TGACG	TGAGA	TGAGT	TGAGC	TGAGG
TGT	TGTAA	TGTAT	TGTAC	TGTAG	TGTTA	TGTTT	TGTTC	TGTTG	TGTCA	TGTCT	TGTCC	TGTCG	TGTGA	TGTGT	TGTGC	TGTGG
TGC	TGCAA	TGCAT	TGCAC	TGCAG	TGCTA	TGCTT	TGCTC	TGCTG	TGCCA	TGCCT	TGCCC	TGCCG	TGCGA	TGCGT	TGCGC	TGCGG
TGG	TGGAA	TGGAT	TGGAC	TGGAG	TGGTA	TGGTT	TGGTC	TGGTG	TGGCA	TGGCT	TGGCC	TGGCG	TGGGA	TGGGT	TGGGC	TGGGG
CAA	CAAAA	CAAAT	CAAAC	CAAAG	CAATA	CAATT	CAATC	CAATG	CAACA	CAACT	CAACC	CAACG	CAAGA	CAAGT	CAAGC	CAAGG
CAT	CATAA	CATAT	CATAC	CATAG	CATTA	CATTT	CATTC	CATTG	CATCA	CATCT	CATCC	CATCG	CATGA	CATGT	CATGC	CATGG
CAC	CACAA	CACAT	CACAC	CACAG	CACTA	CACTT	CACTC	CACTG	CACCA	CACCT	CACCC	CACCG	CACGA	CACGT	CACGC	CACGG
CAG	CAGAA	CAGAT	CAGAC	CAGAG	CAGTA	CAGTT	CAGTC	CAGTG	CAGCA	CAGCT	CAGCC	CAGCG	CAGGA	CAGGT	CAGGC	CAGGG

CTA	CTAAA	CTAAT	CTAAC	CTAAG	CTATA	CTATT	CTATC	CTATG	CTACA	CTACT	CTACC	CTACG	CTAGA	CTAGT	CTAGC	CTAGG
CTT	CTTAA	CTTAT	CTTAC	CTTAG	CTTTA	CTTTT	CTTTC	CTTTG	CTTCA	CTTCT	CTTCC	CTTCG	CTTGA	CTTGT	CTTGC	CTTGG
CTC	CTCAA	CTCAT	CTCAC	CTCAG	CTCTA	CTCTT	CTCTC	CTCTG	CTCCA	CTCCT	CTCCC	CTCCG	CTCGA	CTCGT	CTCGC	CTCGG
CTG	CTGAA	CTGAT	CTGAC	CTGAG	CTGTA	CTGTT	CTGTC	CTGTG	CTGCA	CTGCT	CTGCC	CTGCG	CTGGA	CTGGT	CTGGC	CTGGG
CCA	CCAAA	CCAAT	CCAAC	CCAAG	CCATA	CCATT	CCATC	CCATG	CCACA	CCACT	CCACC	CCACG	CCAGA	CCAGT	CCAGC	CCAGG
CCT	CCTAA	CCTAT	CCTAC	CCTAG	CCTTA	CCTTT	CCTTC	CCTTG	CCTCA	CCTCT	CCTCC	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	CCCTC	CCCTG	CCCCA	CCCCT	CCCCC	CCCCG	CCCGA	CCCGT	CCCGC	CCCGG
CCG	CCGAA	CCGAT	CCGAC	CCGAG	CCGTA	CCGTT	CCGTC	CCGTG	CCGCA	CCGCT	CCGCC	CCGCG	CCGGA	CCGGT	CCGGC	CCGGG
CGA	CGAAA	CGAAT	CGAAC	CGAAG	CGATA	CGATT	CGATC	CGATG	CGACA	CGACT	CGACC	CGACG	CGAGA	CGAGT	CGAGC	CGAGG
CGT	CGTAA	CGTAT	CGTAC	CGTAG	CGTTA	CGTTT	CGTTC	CGTTG	CGTCA	CGTCT	CGTCC	CGTCG	CGTGA	CGTGT	CGTGC	CGTGG
CGC	CGCAA	CGCAT	CGCAC	CGCAG	CGCTA	CGCTT	CGCTC	CGCTG	CGCCA	CGCCT	CGCCC	CGCCG	CGCGA	CGCGT	CGCGC	CGCGG
CGG	CGGAA	CGGAT	CGGAC	CGGAG	CGGTA	CGGTT	CGGTC	CGGTG	CGGCA	CGGCT	CGGCC	CGGCG	CGGGA	CGGGT	CGGGC	CGGGG
GAA	GAAAA	GAAAT	GAAAC	GAAAG	GAATA	GAATT	GAATC	GAATG	GAACA	GAACT	GAACC	GAACG	GAAGA	GAAGT	GAAGC	GAAGG
GAT	GATAA	GATAT	GATAC	GATAG	GATTA	GATTT	GATTC	GATTG	GATCA	GATCT	GATCC	GATCG	GATGA	GATGT	GATGC	GATGG
GAC	GACAA	GACAT	GACAC	GACAG	GACTA	GACTT	GACTC	GACTG	GACCA	GACCT	GACCC	GACCG	GACGA	GACGT	GACGC	GACGG
GAG	GAGAA	GAGAT	GAGAC	GAGAG	GAGTA	GAGTT	GAGTC	GAGTG	GAGCA	GAGCT	GAGCC	GAGCG	GAGGA	GAGGT	GAGGC	GAGGG
GTA	GTAAA	GTAAT	GTAAC	GTAAG	GTATA	GTATT	GTATC	GTATG	GTACA	GTACT	GTACC	GTACG	GTAGA	GTAGT	GTAGC	GTAGG
GTT	GTTAA	GTTAT	GTTAC	GTTAG	GTTTA	GTTTT	GTTTC	GTTTG	GTTCA	GTTCT	GTTCC	GTTCG	GTTGA	GTTGT	GTTGC	GTTGG
GTC	GTCAA	GTCAT	GTCAC	GTCAG	GTCTA	GTCTT	GTCTC	GTCTG	GTCCA	GTCCT	GTCCC	GTCCG	GTCGA	GTCGT	GTCGC	GTCGG
GTG	GTGAA	GTGAT	GTGAC	GTGAG	GTGTA	GTGTT	GTGTC	GTGTG	GTGCA	GTGCT	GTGCC	GTGCG	GTGGA	GTGGT	GTGGC	GTGGG
GCA	GCAAA	GCAAT	GCAAC	GCAAG	GCATA	GCATT	GCATC	GCATG	GCACA	GCACT	GCACC	GCACG	GCAGA	GCAGT	GCAGC	GCAGG
GCT	GCTAA	GCTAT	GCTAC	GCTAG	GCTTA	GCTTT	GCTTC	GCTTG	GCTCA	GCTCT	GCTCC	GCTCG	GCTGA	GCTGT	GCTGC	GCTGG
GCC	GCCAA	GCCAT	GCCAC	GCCAG	GCCTA	GCCTT	GCCTC	GCCTG	GCCCA	GCCCT	GCCCC	GCCCG	GCCGA	GCCGT	GCCGC	GCCGG
GCG	GCGAA	GCGAT	GCGAC	GCGAG	GCGTA	GCGTT	GCGTC	GCGTG	GCGCA	GCGCT	GCGCC	GCGCG	GCGGA	GCGGT	GCGGC	GCGGG
GGA	GGAAA	GGAAT	GGAAC	GGAAG	GGATA	GGATT	GGATC	GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGAGG
GGT	GGTAA	GGTAT	GGTAC	GGTAG	GGTTA	GGTTT	GGTTC	GGTTG	GGTCA	GGTCT	GGTCC	GGTCG	GGTGA	GGTGT	GGTGC	GGTGG
GGC	GGCAA	GGCAT	GGCAC	GGCAG	GGCTA	GGCTT	GGCTC	GGCTG	GGCCA	GGCCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGCGG
GGG	GGGAA	GGGAT	GGGAC	GGGAG	GGGTA	GGGTT	GGGTC	GGGTG	GGGCA	GGGCT	GGGCC	GGGCG	GGGGA	GGGGT	GGGGC	GGGGG

After filtering: read1: overrepresented sequences

Sampling rate: 1 / 20

overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 150
AACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACC	395 (0.001640%)	
AACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGGCGT	339 (0.001407%)	
AAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAG	99 (0.001027%)	
AAGAGTATTTTTTATTGATGGTACACAGGCATGGCTGACA	3926 (0.016298%)	
AAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTCCACAC	194 (0.000805%)	
AAGCACTGCGACAGGAACTTGAAGTTCACGGGGTCCACAC	30549 (0.126817%)	
AAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTCC	267 (0.001108%)	
AAGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGG	1363 (0.005658%)	
AAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGCCTTGA	130 (0.001349%)	
AAGTGGGCGGCCAGGACGACGACCAGGATGTCACCCAGGA	85 (0.000353%)	
AAGTTCACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTGTCCAGGTTCTTGATGGCATTGCCCAGGG	21 (0.000218%)	
AAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGG	92 (0.000955%)	
AATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGA	113 (0.001173%)	
AATGTCATCAACGTGGTTGGCAGCTTCAACCAGTGCAGCT	21 (0.000087%)	
AATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGA	12 (0.000125%)	
ACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACT	953 (0.009890%)	
ACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGA	2996 (0.012437%)	
ACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGGGTTGCG	275 (0.002854%)	
ACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACCCAGGCGGG	106 (0.001100%)	
ACAGGAACTTGAAGTTCACGGGGTCCACACGCAGGTTGTA	1502 (0.006235%)	
ACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCC	848 (0.008801%)	
ACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGG	994 (0.004126%)	

ACCACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGA	169 (0.000702%)	
ACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAG	172 (0.000714%)	
ACCACCTGCAAGCACTGCGACAGGAACTTGAAGTTCACGG	652 (0.002707%)	
ACCACTTTCTTGCCATGGCCACGGATCTGGTCAGAGCCTT	162 (0.000673%)	
ACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAACCAGT	1168 (0.004849%)	
ACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGT	159 (0.000660%)	
ACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCA	731 (0.003035%)	
ACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCT	779 (0.003234%)	
ACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTT	293 (0.001216%)	
ACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGG TGTTCTTGATGCTGTCCAGGTTCTTGACG	73 (0.000758%)	
ACCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGAC	110 (0.000457%)	
ACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGG	141 (0.000585%)	
ACCTCGGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCA	104870 (0.435345%)	
ACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGT	936 (0.003886%)	
ACCTGCAAGCACTGCGACAGGAACTTGAAGTTCACGGGGT	2717 (0.011279%)	
ACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTC	203 (0.000843%)	
ACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACAGGT	91 (0.000378%)	
ACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGT	91 (0.000378%)	
ACGACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGG	240 (0.000996%)	
ACGATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCACTCGG	293 (0.001216%)	
ACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGG	315 (0.001308%)	
ACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGAC CTCTGGGGTCAGCAGAGAGGGGTTGCGAG	248 (0.002574%)	
ACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTGTCCAG GTTCTTGATGGCATTGCCCAGGGCAGCCA	1775 (0.018421%)	
ACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAG CGTGGACCTCTGGGGTCAGCAGAGAGGGG	154 (0.001598%)	
ACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGAC GGCCTCCCCGAAGGAGGTGAGCACCTTCT	164 (0.001702%)	
ACGTGGTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCT	43425 (0.180269%)	
ACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCA	228 (0.000946%)	
ACTGACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAG	67683 (0.280971%)	
ACTGCGACAGGAACTTGAAGTTCACGGGGTCCACACGCAG	2942 (0.012213%)	
ACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGGCGTG	696 (0.002889%)	
ACTTGCGGGCCAGAGCGTGGGCAACCACACGCACCAGCTT	518 (0.002150%)	
AGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGA GAAGAGAAGAGAAGAGAAGAGAAGAGAAG	109 (0.001131%)	
AGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCT	325 (0.001349%)	

AGACGATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCACTC	2273 (0.009436%)	
AGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGA	183 (0.001899%)	
AGAGAGGGGTTGCGAGTGGCCACCACCACCAGGAAGCACT	289 (0.001200%)	
AGAGCGTGGGCAACCACACGCACCAGCTTCTGCCAGGCAG	223 (0.000926%)	
AGAGCGTGGGCAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGTCGGGAGTGAAGTCCTTGCCGAAGTGGGCGGCCAGGACGACGACCAGGATGT	97 (0.001007%)	
AGAGGGCACCAGCAATGTCATCAACGTGGTTGGCAGCTTC	820 (0.003404%)	
AGAGGGGTTGCGAGTGGCCACCACCACCAGGAAGCACTGA	353 (0.001465%)	
AGAGTATTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAG	64888 (0.673421%)	
AGCAAGAGTATTTTTTATTGATGGTACACAGGCATGGCTG	48535 (0.201482%)	
AGCAATGTCATCAACGTGGTTGGCAGCTTCAACCAGTGCA	220 (0.000913%)	
AGCACCACCTGCAAGCACTGCGACAGGAACTTGAAGTTCA	267 (0.001108%)	
AGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGA	597 (0.002478%)	
AGCACTGACCCAGCAGTTTGAAGTTGACAGGGTCCACACG	279 (0.001158%)	
AGCACTGCGACAGGAACTTGAAGTTCACGGGGTCCACACG	2322 (0.009639%)	
AGCAGAGAGGGGTTGCGAGTGGCCACCACCACCAGGAAGC	1316 (0.005463%)	
AGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTC	526 (0.002184%)	
AGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTTGGG	1760 (0.007306%)	
AGCCACCACTTTCTTGCCATGGCCACGGATCTGGTCAGAG	79 (0.000328%)	
AGCCAGCACCACCTGCAAGCACTGCGACAGGAACTTGAAG	249 (0.001034%)	
AGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAGCATGATTAC	15 (0.000156%)	
AGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACCCAGGCGGGTA	526 (0.005459%)	
AGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAG	219 (0.002273%)	
AGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAG	636 (0.002640%)	
AGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTCCT	226 (0.000938%)	
AGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCC	408 (0.001694%)	
AGCTTGGAGAGGGCACCAGCAATGTCATCAACGTGGTTGG	391 (0.001623%)	
AGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCA	415 (0.004307%)	
AGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGG	1466 (0.006086%)	
AGGAACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGG	1836 (0.007622%)	
AGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTCCA	165 (0.000685%)	
AGGACGACGACCAGGATGTCACCCAGGAGCCTGAAGTTCT	268 (0.001113%)	
AGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGG	138 (0.000573%)	
AGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGT	334 (0.003466%)	
AGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACG	191 (0.001982%)	

GCAGAGTGCACCTCGGGGCTGTACTCCTT		
AGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGACAGGA	147 (0.000610%)	
AGGGCACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAA	597 (0.002478%)	
AGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGA AGGCTTCTCAGATGATGAAGATTAGCATG	55 (0.000571%)	
AGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGC TGTCCACTGCACCATGGTGCTGGCTTTGC	72 (0.000747%)	
AGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAG TGCCCACGGCACACAGGAACTTGTCCAGG	372 (0.003861%)	
AGGGGTTGCGAGTGGCCACCACCACCAGGAAGCACTGACC	238 (0.000988%)	
AGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCG	541 (0.002246%)	
AGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTT	105 (0.000436%)	
AGGTTCTTGATGGCATTGCCCAGGGCAGCCACCACTTTCT	299 (0.001241%)	
AGTATTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCA CGGCCGACATGAACTTGTCGACGGCAGAG	176 (0.001827%)	
AGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAG	1025 (0.004255%)	
AGTGGCCACCACCACCAGGAAGCACTGACCCAGCAGTTTG	113 (0.000469%)	
AGTGGGCGGCCAGGACGACGACCAGGATGTCACCCAGGAG	412 (0.001710%)	
AGTGGTACTTGCGGGCCAGAGCGTGGGCAACCACACGCAC	482 (0.002001%)	
AGTTCACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTG TCCAGGTTCTTGATGGCATTGCCCAGGGC	26 (0.000270%)	
AGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTG TCCAGGTTCTTGACGGCCTCCCCGAAGGA	205 (0.002128%)	
AGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGGGCAC	286 (0.001187%)	
ATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGG CTGTACTCCTTACCCAGGCGGGTAGCCAG	2846 (0.029536%)	
ATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGC	625 (0.002595%)	
ATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAG AGTGCACCTCGGGGCTGTACTCCTTACCC	1448 (0.015028%)	
ATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAAC TTGTCGACGGCAGAGTGCACCTCGGGGCT	458 (0.004753%)	
ATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGA GAAGGTGTTCTTGATGCTGTCCAGGTTCT	124 (0.001287%)	
ATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCT TTGCGTTTTGATGCGAAGGCTTCTCAGAT	23 (0.000239%)	
ATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACAT GAACTTGTCGACGGCAGAGTGCACCTCGG	80 (0.000830%)	
ATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCACGG	245 (0.001017%)	
ATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGC	969 (0.004023%)	
ATTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGG CCGACATGAACTTGTCGACGGCAGAGTGC	4093 (0.042478%)	
CAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGTC	238 (0.000988%)	
CAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGAC	4708 (0.019544%)	
CAAGAGTATTTTTTATTGATGGTACACAGGCATGGCTGAC	4489 (0.018635%)	
CAATGTCATCAACGTGGTTGGCAGCTTCAACCAGTGCAGC	38 (0.000158%)	
CACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAG	981 (0.004072%)	
CACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCG	3900 (0.040475%)	

ACGGCAGAGTGCACCTCGGGGCTGTACTC		
CACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCG	9631 (0.039981%)	
CACCACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTG	205 (0.000851%)	
CACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACA	189 (0.000785%)	
CACCACCTGCAAGCACTGCGACAGGAACTTGAAGTTCACG	298 (0.001237%)	
CACCACTTTCTTGCCATGGCCACGGATCTGGTCAGAGCCT	464 (0.001926%)	
CACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAACCAG	433 (0.001798%)	
CACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGG	420 (0.001744%)	
CACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAG GTGTTCTTGATGCTGTCCAGGTTCTTGAC	835 (0.008666%)	
CACCTGCAAGCACTGCGACAGGAACTTGAAGTTCACGGGG	44847 (0.186172%)	
CACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTT	1383 (0.005741%)	
CACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGACG	1069 (0.004438%)	
CACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACAGG	141 (0.000585%)	
CACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAG	936 (0.003886%)	
CACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGA CCTCTGGGGTCAGCAGAGAGGGGTTGCGA	2250 (0.023351%)	
CACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTGTCCA GGTTCTTGATGGCATTGCCCAGGGCAGCC	5227 (0.054247%)	
CACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAA GCGTGGACCTCTGGGGTCAGCAGAGAGGG	2485 (0.025790%)	
CACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGA CGGCCTCCCCGAAGGAGGTGAGCACCTTC	653 (0.006777%)	
CACTGACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCA	349 (0.001449%)	
CACTGCGACAGGAACTTGAAGTTCACGGGGTCCACACGCA	2014 (0.008361%)	
CAGAGAGGGGTTGCGAGTGGCCACCACCACCAGGAAGCAC	557 (0.002312%)	
CAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCTT	478 (0.001984%)	
CAGAGCGTGGGCAACCACACGCACCAGCTTCTGCCAGGCA	2056 (0.008535%)	
CAGAGCGTGGGCAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGTCGGGAGTGAAGTCCTTGCCGA AGTGGGCGGCCAGGACGACGACCAGGATG	627 (0.006507%)	
CAGCAATGTCATCAACGTGGTTGGCAGCTTCAACCAGTGC	780 (0.003238%)	
CAGCACCACCTGCAAGCACTGCGACAGGAACTTGAAGTTC	388 (0.001611%)	
CAGCAGAGAGGGGTTGCGAGTGGCCACCACCACCAGGAAG	123395 (0.512247%)	
CAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTTGG	1233 (0.005119%)	
CAGCCACCACTTTCTTGCCATGGCCACGGATCTGGTCAGA	138 (0.000573%)	
CAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGC TTCTCAGATGATGAAGATTAGCATGATTA	141 (0.001463%)	
CAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACC TCGGGGCTGTACTCCTTACCCAGGCGGGT	824 (0.008552%)	
CAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTT GTCCAGGGAAGCGTGGACCTCTGGGGTCA	1242 (0.012890%)	
CAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGA	1337 (0.005550%)	
CAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACC	79 (0.000328%)	

CAGGAACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAG	3812 (0.015825%)	
CAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTCC	477 (0.001980%)	
CAGGACGACGACCAGGATGTCACCCAGGAGCCTGAAGTTC	347 (0.001440%)	
CAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGG	2695 (0.027969%)	
CAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCT	1839 (0.019086%)	
CAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGACAGG	552 (0.002292%)	
CAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTCCACTGCACCATGGTGCTGGCTTTG	183 (0.001899%)	
CAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGC	2236 (0.009282%)	
CAGGTTCTTGATGGCATTGCCCAGGGCAGCCACCACTTTC	1572 (0.006526%)	
CAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGGGTTGCGAGTGGCCACCACCACCAGGAA	516 (0.005355%)	
CAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGA	571 (0.002370%)	
CAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTTGGGCG	455 (0.001889%)	
CAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGGGCA	309 (0.001283%)	
CATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACCCAGGCGGGTAGCCA	443 (0.004598%)	
CATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACC	638 (0.006621%)	
CATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCACG	206 (0.000855%)	
CCACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGA	1057 (0.004388%)	
CCACCACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTT	212 (0.000880%)	
CCACCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGAC	269 (0.001117%)	
CCACCACTTTCTTGCCATGGCCACGGATCTGGTCAGAGCC	308 (0.001279%)	
CCACCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGG	215 (0.000893%)	
CCACCTGCAAGCACTGCGACAGGAACTTGAAGTTCACGGG	937 (0.003890%)	
CCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTT	1629 (0.006762%)	
CCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAGGTGAGCACCTT	1393 (0.014457%)	
CCAGCAATGTCATCAACGTGGTTGGCAGCTTCAACCAGTG	725 (0.003010%)	
CCAGCACCACCTGCAAGCACTGCGACAGGAACTTGAAGTT	614 (0.002549%)	
CCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTTG	594 (0.002466%)	
CCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTC	3172 (0.032920%)	
CCAGGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTC	1378 (0.005720%)	
CCAGGACGACGACCAGGATGTCACCCAGGAGCCTGAAGTT	404 (0.001677%)	
CCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAG	43946 (0.456080%)	
CCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGACAG	260 (0.001079%)	
CCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCG	202 (0.002096%)	

GCTGTCCACTGCACCATGGTGCTGGCTTT		
CCAGGTTCTTGATGGCATTGCCCAGGGCAGCCACCACTTT	6495 (0.026963%)	
CCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTG	1208 (0.005015%)	
CCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTT	698 (0.002898%)	
CCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGACA	298 (0.001237%)	
CCCCGAAGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCAC	242 (0.001005%)	
CCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGG	1154 (0.004791%)	
CCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCTTGGTCT	1944 (0.008070%)	
CCGAAGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCT	16963 (0.070418%)	
CCGAAGTGGGCGGCCAGGACGACGACCAGGATGTCACCCA	546 (0.002267%)	
CCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGA	1891 (0.007850%)	
CCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTC TCAGATGATGAAGATTAGCATGATTACGG	216 (0.002242%)	
CCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGG	2230 (0.009257%)	
CCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTC CACTGCACCATGGTGCTGGCTTTGCTGGG	202 (0.002096%)	
CCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGCCTTGAC	67606 (0.280651%)	
CCTCGGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCAC	2663 (0.011055%)	
CCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGA TGCTGTCCAGGTTCTTGACGGCCTCCCCG	1019 (0.010575%)	
CCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTA	1281 (0.005318%)	
CCTGGCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCT CCTCGGCTGTCCACTGCACCATGGTGCTG	164 (0.001702%)	
CCTTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTG	636 (0.002640%)	
CCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCACAC	2636 (0.010943%)	
CCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCC	923 (0.003832%)	
CCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGG	8855 (0.036760%)	
CCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACAGGTT	310 (0.001287%)	
CCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCG TCGGCGCCATATTCCTCGGCCTGGCCGCC	33663 (0.349361%)	
CGAAGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTT	166 (0.000689%)	
CGAAGTGGGCGGCCAGGACGACGACCAGGATGTCACCCAG	175 (0.000726%)	
CGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGAT GCTTTGCGTTTTGATGCGAAGGCTTCTCA	162 (0.001681%)	
CGACAGGAACTTGAAGTTCACGGGGTCCACACGCAGGTTG	1933 (0.008024%)	
CGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTC	674 (0.002798%)	
CGACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGG	656 (0.002723%)	
CGAGTGGCCACCACCACCAGGAAGCACTGACCCAGCAGTT	1285 (0.005334%)	
CGATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCACTCGGC	1067 (0.004429%)	
CGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGGG	2014 (0.008361%)	

CGCTGGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGGGT	4811 (0.019972%)	
CGCTGTCGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGA	98199 (0.407652%)	
CGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCA CAGTGCCCACGGCACACAGGAACTTGTCC	19358 (0.200901%)	
CGGCCAGGACGACGACCAGGATGTCACCCAGGAGCCTGAA	284 (0.001179%)	
CGGGCCAGAGCGTGGGCAACCACACGCACCAGCTTCTGCC	1364 (0.005662%)	
CGGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCAC	8099 (0.033621%)	
CGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGG TTCTTGACGGCCTCCCCGAAGGAGGTGAG	2948 (0.030595%)	
CGGGTAGCCAGCACCACCTGCAAGCACTGCGACAGGAACT	1376 (0.005712%)	
CGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGC GTGGACCTCTGGGGTCAGCAGAGAGGGGT	320 (0.003321%)	
CGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAA	2220 (0.009216%)	
CGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACG GCCTCCCCGAAGGAGGTGAGCACCTTCTT	582 (0.006040%)	
CGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCT CAGATGATGAAGATTAGCATGATTACGGC	673 (0.006985%)	
CGTGGCGCTGGACAGGTTCCCGAAGTTGGCGAAGAACCTC	26458 (0.109835%)	
CGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGC	50057 (0.207801%)	
CGTGGTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTT	224 (0.000930%)	
CTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCG GGGCTGTACTCCTTACCCAGGCGGGTAGC	3286 (0.034103%)	
CTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCAC	1536 (0.006376%)	
CTCCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCAC	140312 (0.582474%)	
CTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTCC ACTGCACCATGGTGCTGGCTTTGCTGGGC	411 (0.004265%)	
CTCGGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACC	8635 (0.035846%)	
CTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCA GGTTCTTGACGGCCTCCCCGAAGGAGGTG	5640 (0.058533%)	
CTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGAT GCTGTCCAGGTTCTTGACGGCCTCCCCGA	5385 (0.055887%)	
CTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTG CACCTCGGGGCTGTACTCCTTACCCAGGC	933 (0.009683%)	
CTGACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGT	1312 (0.005446%)	
CTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAG	2302 (0.009556%)	
CTGAGCTTGGAGAGGGCACCAGCAATGTCATCAACGTGGT	7087 (0.029420%)	
CTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCC	740 (0.003072%)	
CTGCGACAGGAACTTGAAGTTCACGGGGTCCACACGCAGG	2373 (0.009851%)	
CTGGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGGGTCC	26089 (0.108303%)	
CTGGCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTC CTCGGCTGTCCACTGCACCATGGTGCTGG	573 (0.005947%)	
CTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCC CACGGCACACAGGAACTTGTCCAGGGAAG	16972 (0.176139%)	
CTGTACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCA	2597 (0.010781%)	
CTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTCCTGT	285 (0.001183%)	

CTTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGC	1165 (0.004836%)	
CTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCACACG	2783 (0.011553%)	
CTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTT	1013 (0.004205%)	
CTTCACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGC	7375 (0.030616%)	
CTTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTC	532 (0.005521%)	
CTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCT	660 (0.002740%)	
CTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATG	1159 (0.004811%)	
CTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGGCGTGC	880 (0.003653%)	
CTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGG	2790 (0.011582%)	
CTTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTGCCG	565 (0.002345%)	
CTTGATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCA	681 (0.002827%)	
CTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGA	2372 (0.009847%)	
CTTGCCGAAGTGGGCGGCCAGGACGACGACCAGGATGTCA	122814 (0.509835%)	
CTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGG	2065 (0.008572%)	
CTTGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCC	1512 (0.006277%)	
CTTGCGGGCCAGAGCGTGGGCAACCACACGCACCAGCTTC	4633 (0.019233%)	
CTTGGAGAGGGCACCAGCAATGTCATCAACGTGGTTGGCA	1016 (0.004218%)	
CTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGGGTTGCGAGTGGCCACCACCACC	16523 (0.171479%)	
CTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACAGGTTC	2035 (0.008448%)	
CTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCG	10117 (0.041999%)	
CTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCCG	1053 (0.010928%)	
CTTTTTTTTT	171118 (0.177590%)	
GAACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGGCG	371 (0.001540%)	
GAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGA	652 (0.006767%)	
GAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTCCACA	354 (0.001470%)	
GAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTC	247 (0.001025%)	
GAAGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTG	104 (0.000432%)	
GAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGCCTTG	258 (0.002678%)	
GAAGTGGGCGGCCAGGACGACGACCAGGATGTCACCCAGG	116 (0.000482%)	
GAAGTTCACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTGTCCAGGTTCTTGATGGCATTGCCCAGG	28975 (0.300708%)	
GAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAG	377 (0.003913%)	
GAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAG	521 (0.005407%)	
GAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATG	20 (0.000208%)	

CTTTGCGTTTTGATGCGAAGGCTTCTCAG		
GACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACCCAGGCGG	408 (0.004234%)	
GACAGGAACTTGAAGTTCACGGGGTCCACACGCAGGTTGT	1849 (0.007676%)	
GACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCC	642 (0.002665%)	
GACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTTT	553 (0.002296%)	
GACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTG	574 (0.002383%)	
GACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAG	1343 (0.005575%)	
GACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCGGGG	252 (0.001046%)	
GACGACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTCG	221 (0.000917%)	
GACGATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCACTCG	1422 (0.005903%)	
GAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAA	310 (0.003217%)	
GAGAGGGCACCAGCAATGTCATCAACGTGGTTGGCAGCTT	393 (0.001631%)	
GAGAGGGGTTGCGAGTGGCCACCACCACCAGGAAGCACTG	411 (0.001706%)	
GAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCG	650 (0.002698%)	
GAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGT	614 (0.002549%)	
GAGCGTGGGCAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGTCGGGAGTGAAGTCCTTGCCGAAGTGGGCGGCCAGGACGACGACCAGGATGTC	69 (0.000716%)	
GAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACC	940 (0.009756%)	
GAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCG	3274 (0.013591%)	
GAGGGCACCAGCAATGTCATCAACGTGGTTGGCAGCTTCA	1143 (0.004745%)	
GAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAGCAT	129 (0.001339%)	
GAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAG	2289 (0.023756%)	
GAGGGGTTGCGAGTGGCCACCACCACCAGGAAGCACTGAC	849 (0.003524%)	
GAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGT	107 (0.000444%)	
GAGTATTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGA	816 (0.008469%)	
GAGTGGCCACCACCACCAGGAAGCACTGACCCAGCAGTTT	119 (0.000494%)	
GATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCACTCGGCC	167 (0.000693%)	
GATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCATGG	480 (0.001993%)	
GATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGC	765 (0.007939%)	
GATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTC	128 (0.001328%)	
GCAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGT	5807 (0.024106%)	
GCAAGAGTATTTTTTATTGATGGTACACAGGCATGGCTGA	18532 (0.076932%)	
GCAATGTCATCAACGTGGTTGGCAGCTTCAACCAGTGCAG	308 (0.001279%)	
GCACCACCTGCAAGCACTGCGACAGGAACTTGAAGTTCAC	511 (0.002121%)	
GCACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAACCA	857 (0.003558%)	

GCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGAC	2815 (0.011686%)	
GCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACAG	763 (0.003167%)	
GCACTGACCCAGCAGTTTGAAGTTGACAGGGTCCACACGC	425 (0.001764%)	
GCACTGCGACAGGAACTTGAAGTTCACGGGGTCCACACGC	3598 (0.014936%)	
GCAGAGAGGGGTTGCGAGTGGCCACCACCACCAGGAAGCA	1750 (0.007265%)	
GCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCT	1168 (0.004849%)	
GCAGCCACCACTTTCTTGCCATGGCCACGGATCTGGTCAG	449 (0.001864%)	
GCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGG CTTCTCAGATGATGAAGATTAGCATGATT	181 (0.001878%)	
GCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAG	1006 (0.004176%)	
GCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGAC	660 (0.002740%)	
GCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGA GGGGTTGCGAGTGGCCACCACCACCAGGA	3707 (0.038472%)	
GCAGTTTGAAGTTGACAGGGTCCACACGCAGTTTTTGGGC	7215 (0.029951%)	
GCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGGGC	1103 (0.004579%)	
GCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGC AGAGTGCACCTCGGGGCTGTACTCCTTAC	757 (0.007856%)	
GCATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCAC	927 (0.003848%)	
GCCACCACCACCAGGAAGCACTGACCCAGCAGTTTGAAGT	994 (0.004126%)	
GCCACCACTTTCTTGCCATGGCCACGGATCTGGTCAGAGC	203 (0.000843%)	
GCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCT	1685 (0.006995%)	
GCCAGAGCGTGGGCAACCACACGCACCAGCTTCTGCCAGGCAGCCTGGCAGTCGGGAGTGAAGTCCTTGCC GAAGTGGGCGGCCAGGACGACGACCAGGA	57996 (0.601894%)	
GCCAGCACCACCTGCAAGCACTGCGACAGGAACTTGAAGT	2079 (0.008631%)	
GCCAGGACGACGACCAGGATGTCACCCAGGAGCCTGAAGT	1846 (0.007663%)	
GCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTC GGCTGTCCACTGCACCATGGTGCTGGCTT	392 (0.004068%)	
GCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGGTCTTGGTC	8070 (0.033501%)	
GCCGAAGTGGGCGGCCAGGACGACGACCAGGATGTCACCC	1926 (0.007995%)	
GCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCG	30289 (0.125738%)	
GCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTT CTCAGATGATGAAGATTAGCATGATTACG	277 (0.002875%)	
GCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTG	2588 (0.010744%)	
GCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGT CCACTGCACCATGGTGCTGGCTTTGCTGG	328 (0.003404%)	
GCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTG ATGCTGTCCAGGTTCTTGACGGCCTCCCC	7811 (0.081064%)	
GCCTGGCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTC TCCTCGGCTGTCCACTGCACCATGGTGCT	24000 (0.249077%)	
GCGACAGGAACTTGAAGTTCACGGGGTCCACACGCAGGTT	3411 (0.014160%)	
GCGAGTGGCCACCACCACCAGGAAGCACTGACCCAGCAGT	674 (0.002798%)	

GCGCTGGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGGG	1568 (0.006509%)	
GCGGCCAGGACGACGACCAGGATGTCACCCAGGAGCCTGA	1193 (0.004952%)	
GCGGGCCAGAGCGTGGGCAACCACACGCACCAGCTTCTGC	2456 (0.010196%)	
GCGGGTAGCCAGCACCACCTGCAAGCACTGCGACAGGAAC	1650 (0.006850%)	
GCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTC GGGGCTGTACTCCTTACCCAGGCGGGTAG	1748 (0.018141%)	
GCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGT GCACCTCGGGGCTGTACTCCTTACCCAGG	963 (0.009994%)	
GCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGC	922 (0.003827%)	
GCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGC CCACGGCACACAGGAACTTGTCCAGGGAA	3607 (0.037434%)	
GCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGC	2006 (0.008327%)	
GCTGTCGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGAC	2450 (0.010171%)	
GCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTCCTG	302 (0.001254%)	
GCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCT	1206 (0.005006%)	
GCTTCACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGG	6707 (0.027843%)	
GCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGG	1343 (0.005575%)	
GCTTGGAGAGGGCACCAGCAATGTCATCAACGTGGTTGGC	1197 (0.004969%)	
GCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGC	7172 (0.029773%)	
GGAACTTGAAGTTCACGGGGTCCACACGCAGGTTGTAGGC	1452 (0.006028%)	
GGAAGCACTGACCCAGCAGTTTGAAGTTGACAGGGTCCAC	588 (0.002441%)	
GGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCC TGGCCGCCGATTTTGCTGAAAGCGGCCTT	1156 (0.011997%)	
GGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGT TTTGATGCGAAGGCTTCTCAGATGATGAA	1283 (0.013315%)	
GGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGGGTCCAG	4589 (0.019050%)	
GGACGACGACCAGGATGTCACCCAGGAGCCTGAAGTTCTC	480 (0.001993%)	
GGAGAGGGCACCAGCAATGTCATCAACGTGGTTGGCAGCT	11171 (0.046374%)	
GGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGC GAAGGCTTCTCAGATGATGAAGATTAGCA	419 (0.004348%)	
GGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCAC AGTGCCCACGGCACACAGGAACTTGTCCA	9215 (0.095635%)	
GGAGGTCACTGAGCTTGGAGAGGGCACCAGCAATGTCATC	3330 (0.013824%)	
GGAGGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGG	124 (0.000515%)	
GGATGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGG GAGAAGGTGTTCTTGATGCTGTCCAGGTT	1468 (0.015235%)	
GGCACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAACC	1986 (0.008244%)	
GGCAGCCACCACTTTCTTGCCATGGCCACGGATCTGGTCA	4484 (0.018614%)	
GGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAG GCTTCTCAGATGATGAAGATTAGCATGAT	332 (0.003446%)	
GGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGA	6646 (0.027589%)	
GGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAG AGGGGTTGCGAGTGGCCACCACCACCAGG	7298 (0.075740%)	
GGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGG	1107 (0.011489%)	

CAGAGTGCACCTCGGGGCTGTACTCCTTA		
GGCATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCA	980 (0.004068%)	
GGCCACCACCACCAGGAAGCACTGACCCAGCAGTTTGAAG	351 (0.001457%)	
GGCCAGAGCGTGGGCAACCACACGCACCAGCTTCTGCCAG	609 (0.002528%)	
GGCCAGGACGACGACCAGGATGTCACCCAGGAGCCTGAAG	389 (0.001615%)	
GGCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTCCACTGCACCATGGTGCTGGCT	117 (0.001214%)	
GGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTCCACTGCACCATGGTGCTGGCTTTGCTG	377 (0.003913%)	
GGCGCTGGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGG	4053 (0.016825%)	
GGCGGCCAGGACGACGACCAGGATGTCACCCAGGAGCCTG	949 (0.003940%)	
GGCGGGTAGCCAGCACCACCTGCAAGCACTGCGACAGGAA	1416 (0.005878%)	
GGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTACTCCTTACCCAG	917 (0.009517%)	
GGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGA	14639 (0.151926%)	
GGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCACCTG	4310 (0.017892%)	
GGCTTCACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGG	58461 (0.242688%)	
GGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTG	2151 (0.008929%)	
GGGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGCCT	3313 (0.034383%)	
GGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAGC	1588 (0.016481%)	
GGGCACCAGCAATGTCATCAACGTGGTTGGCAGCTTCAAC	1090 (0.004525%)	
GGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAGCATGA	825 (0.008562%)	
GGGCCAGAGCGTGGGCAACCACACGCACCAGCTTCTGCCA	436 (0.001810%)	
GGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCCTCGGCTGTCCACTGCACCATGGTGCTGGCTTTGCT	194 (0.002013%)	
GGGCGGCCAGGACGACGACCAGGATGTCACCCAGGAGCCT	510 (0.002117%)	
GGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGG	9361 (0.097150%)	
GGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCACCT	4350 (0.018058%)	
GGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCT	3657 (0.015181%)	
GGGGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGCC	4068 (0.042219%)	
GGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGATGAAGATTAG	3924 (0.040724%)	
GGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCACC	1189 (0.004936%)	
GGGGGAAGTAGGTCTTGGTCTGGGGGTAGGTGGTGAACATCCTCTCCAGGGCGTCGGCGCCATATTCCTCGGCCTGGCCGCCGATTTTGCTGAAAGCGGC	18653 (0.193585%)	
GGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAGGTGAGC	3390 (0.035182%)	
GGGGTTGCCGACGATGGCCGTGGCGCTGGACAGGTTCCCG	8394 (0.034846%)	
GGGGTTGCGAGTGGCCACCACCACCAGGAAGCACTGACCC	5991 (0.024870%)	
GGGTAGCCAGCACCACCTGCAAGCACTGCGACAGGAACTT	524 (0.002175%)	
GGGTCCACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCT	23029 (0.095600%)	

GGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAGGTGAGCA	952 (0.009880%)	
GGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGG	1089 (0.011302%)	
GGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTTAGTGGTACTTGCGGGCCAGAGCGTGGGC	18225 (0.189143%)	
GGGTTGCCGACGATGGCCGTGGCGCTGGACAGGTTCCCGA	906 (0.003761%)	
GGGTTGCGAGTGGCCACCACCACCAGGAAGCACTGACCCA	416 (0.001727%)	
GGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGT	1448 (0.015028%)	
GGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGGGTT	152 (0.001577%)	
GGTACTTGCGGGCCAGAGCGTGGGCAACCACACGCACCAG	4774 (0.019818%)	
GGTAGCCAGCACCACCTGCAAGCACTGCGACAGGAACTTG	169 (0.000702%)	
GGTCCACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTT	577 (0.002395%)	
GGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAGGTGAGCAC	1136 (0.011790%)	
GGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGG	363 (0.003767%)	
GGTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTG	224 (0.000930%)	
GGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCA	292 (0.003030%)	
GGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCG	903 (0.009372%)	
GGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGG	3486 (0.036178%)	
GGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGA	176 (0.000731%)	
GGTTCTTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGG	13633 (0.141486%)	
GGTTCTTGATGGCATTGCCCAGGGCAGCCACCACTTTCTT	1643 (0.006821%)	
GGTTGCGAGTGGCCACCACCACCAGGAAGCACTGACCCAG	1086 (0.004508%)	
GGTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCC	58 (0.000241%)	
GTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTGTA	2191 (0.022739%)	
GTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGAGAGGGGTTG	127 (0.001318%)	
GTACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCAAG	2865 (0.011893%)	
GTACTTGCGGGCCAGAGCGTGGGCAACCACACGCACCAGC	5414 (0.022475%)	
GTAGACGATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCAC	87888 (0.364848%)	
GTAGCCAGCACCACCTGCAAGCACTGCGACAGGAACTTGA	470 (0.001951%)	
GTATTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGT	831 (0.008624%)	
GTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTG	1184 (0.012288%)	
GTCCACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTG	1320 (0.005480%)	
GTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAGGTGAGCACC	2050 (0.021275%)	
GTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGG	5436 (0.056416%)	
GTCGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAG	90329 (0.937452%)	

CACAGTGCCCACGGCACACAGGAACTTGT		
GTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAG	1831 (0.007601%)	
GTGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGC	603 (0.002503%)	
GTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGG	14128 (0.058649%)	
GTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTTA GTGGTACTTGCGGGCCAGAGCGTGGGCAA	1774 (0.018411%)	
GTGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGC	1778 (0.007381%)	
GTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGC GTTTTGATGCGAAGGCTTCTCAGATGATG	630 (0.006538%)	
GTGGAGGTCACTGAGCTTGGAGAGGGCACCAGCAATGTCA	34337 (0.142543%)	
GTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTC AGATGATGAAGATTAGCATGATTACGGCT	456 (0.004732%)	
GTGGCCACCACCACCAGGAAGCACTGACCCAGCAGTTTGA	445 (0.001847%)	
GTGGCGCTGGACAGGTTCCCGAAGTTGGCGAAGAACCTCT	2089 (0.008672%)	
GTGGGCGGCCAGGACGACGACCAGGATGTCACCCAGGAGC	463 (0.001922%)	
GTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCG	5423 (0.022512%)	
GTGGTACTTGCGGGCCAGAGCGTGGGCAACCACACGCACC	7168 (0.029756%)	
GTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCAC GGCACACAGGAACTTGTCCAGGGAAGCGT	3633 (0.037704%)	
GTGGTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTG	217 (0.000901%)	
GTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTT GCGTTTTGATGCGAAGGCTTCTCAGATGA	79 (0.000820%)	
GTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGC ACACAGGAACTTGTCCAGGGAAGCGTGGA	1272 (0.013201%)	
GTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCAC ACAGGAACTTGTCCAGGGAAGCGTGGACC	2766 (0.028706%)	
GTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGAC	1220 (0.005065%)	
GTTCACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTGT CCAGGTTCTTGATGGCATTGCCCAGGGCA	172 (0.001785%)	
GTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGT CCAGGTTCTTGACGGCCTCCCCGAAGGAG	344 (0.003570%)	
GTTCTTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGC TGAGATGCTTTGCGTTTTGATGCGAAGGC	229 (0.002377%)	
GTTCTTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTG	96226 (0.399461%)	
GTTCTTGATGGCATTGCCCAGGGCAGCCACCACTTTCTTG	1019 (0.004230%)	
GTTGCGAGTGGCCACCACCACCAGGAAGCACTGACCCAGC	6055 (0.025136%)	
GTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCG	133 (0.000552%)	
GTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACAC AGGAACTTGTCCAGGGAAGCGTGGACCTC	11029 (0.114461%)	
GTTTTTGGGCGTGGAGGTCACTGAGCTTGGAGAGGGCACC	508 (0.002109%)	
TACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGT CGACGGCAGAGTGCACCTCGGGGCTGTAC	858 (0.008904%)	
TACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTG GACCTCTGGGGTCAGCAGAGAGGGGTTGC	103 (0.001069%)	
TACCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCGA	93 (0.000386%)	
TACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCAAGC	245 (0.001017%)	
TACTTGCGGGCCAGAGCGTGGGCAACCACACGCACCAGCT	750 (0.003113%)	

TAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGC	258 (0.001071%)	
TAGACGATCAGCAGCCTGGCCAGGGCCTCGCCGCCGCACT	1110 (0.004608%)	
TAGCCAGCACCACCTGCAAGCACTGCGACAGGAACTTGAA	115 (0.000477%)	
TAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCACACGCA	476 (0.001976%)	
TATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACA TGAACTTGTCGACGGCAGAGTGCACCTCG	159 (0.001650%)	
TATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGG	169 (0.000702%)	
TATTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACG GCCGACATGAACTTGTCGACGGCAGAGTG	47 (0.000488%)	
TCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTGA	255 (0.001059%)	
TCACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCCC	3512 (0.014579%)	
TCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAA GGTGTTCTTGATGCTGTCCAGGTTCTTGA	161 (0.001671%)	
TCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGG GGCTGTACTCCTTACCCAGGCGGGTAGCC	105 (0.001090%)	
TCCACACGCAGTTTTTGGGCGTGGAGGTCACTGAGCTTGG	973 (0.004039%)	
TCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTT GACGGCCTCCCCGAAGGAGGTGAGCACCT	1204 (0.012495%)	
TCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAAC TTGTCCAGGGAAGCGTGGACCTCTGGGGT	2448 (0.025406%)	
TCCAGGTTCTTGATGGCATTGCCCAGGGCAGCCACCACTT	3117 (0.012940%)	
TCCCCGAAGGAGGTGAGCACCTTCTTGCCGTGGGCTTGCA	1200 (0.004982%)	
TCCTTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCACT	583 (0.002420%)	
TCCTTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCACA	54242 (0.225174%)	
TCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGA TGCTTTGCGTTTTGATGCGAAGGCTTCTC	47 (0.000488%)	
TCGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGC ACAGTGCCCACGGCACACAGGAACTTGTC	1715 (0.017799%)	
TCGGGGCTGTACTCCTTACCCAGGCGGGTAGCCAGCACCA	1058 (0.004392%)	
TCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAG GTTCTTGACGGCCTCCCCGAAGGAGGTGA	689 (0.007151%)	
TCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCC AGGTTCTTGACGGCCTCCCCGAAGGAGGT	732 (0.007597%)	
TCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGC TGTACTCCTTACCCAGGCGGGTAGCCAGC	410 (0.004255%)	
TCTTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTG AGATGCTTTGCGTTTTGATGCGAAGGCTT	65 (0.000675%)	
TCTTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTGCC	309 (0.001283%)	
TCTTGATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCC	579 (0.002404%)	
TCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAG	337 (0.001399%)	
TCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGC	455 (0.001889%)	
TGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATG CTGTCCAGGTTCTTGACGGCCTCCCCGAA	1160 (0.012039%)	
TGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGC ACCTCGGGGCTGTACTCCTTACCCAGGCG	715 (0.007420%)	
TGACCCAGCAGTTTGAAGTTGACAGGGTCCACACGCAGTT	1717 (0.007128%)	
TGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGT	1559 (0.006472%)	

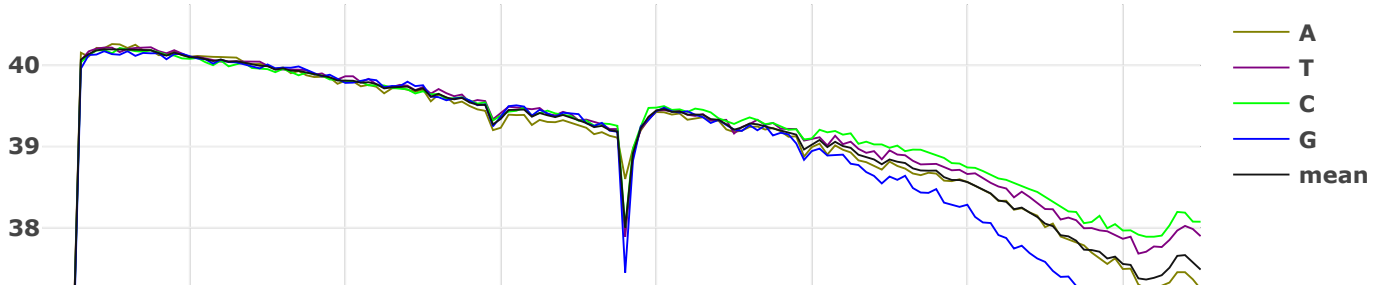
TGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAA	582 (0.002416%)	
TGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTGCCGTG	174 (0.000722%)	
TGAGCACCTTCTTGCCGTGGGCTTGCACCTTGGGGTTGCC	473 (0.001964%)	
TGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGAAGTAGG	1430 (0.005936%)	
TGAGCTTGGAGAGGGCACCAGCAATGTCATCAACGTGGTT	608 (0.002524%)	
TGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGC	1313 (0.005451%)	
TGAGCTTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCAGCGCGGCCGGACACTCCTGTTGCTCCTTAG TGGTACTTGCGGGCCAGAGCGTGGGCAAC	270 (0.002802%)	
TGATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCATG	319 (0.001324%)	
TGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGA ACTTGTCGACGGCAGAGTGCACCTCGGGG	1175 (0.012194%)	
TGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGACA	1125 (0.004670%)	
TGCAGCTGCCACCTTCTTGCCGTGACCCTTGACCTGAGCA	979 (0.004064%)	
TGCCACCTTCTTGCCGTGACCCTTGACCTGAGCAGAGCCC	552 (0.002292%)	
TGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCACGGAT	146 (0.000606%)	
TGCCGAAGTGGGCGGCCAGGACGACGACCAGGATGTCACC	541 (0.002246%)	
TGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGTC	1161 (0.004820%)	
TGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGT	318 (0.001320%)	
TGCGACAGGAACTTGAAGTTCACGGGGTCCACACGCAGGT	2763 (0.011470%)	
TGCGAGTGGCCACCACCACCAGGAAGCACTGACCCAGCAG	1523 (0.006322%)	
TGCGGGCCAGAGCGTGGGCAACCACACGCACCAGCTTCTG	1978 (0.008211%)	
TGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCG TTTTGATGCGAAGGCTTCTCAGATGATGA	29 (0.000301%)	
TGGACAGGTTCCCGAAGTTGGCGAAGAACCTCTGGGTCCA	5666 (0.023521%)	
TGGAGAGGGCACCAGCAATGTCATCAACGTGGTTGGCAGC	218 (0.000905%)	
TGGAGGTCACTGAGCTTGGAGAGGGCACCAGCAATGTCAT	7909 (0.032832%)	
TGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCA GATGATGAAGATTAGCATGATTACGGCTG	80 (0.000830%)	
TGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGTG	43 (0.000179%)	
TGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAGA GAGGGGTTGCGAGTGGCCACCACCACCAG	2654 (0.027544%)	
TGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCC	1393 (0.005783%)	
TGGCCACCACCACCAGGAAGCACTGACCCAGCAGTTTGAA	139 (0.000577%)	
TGGCCAGGGCCTCGCCGCCGCACTCGGCCACGTTGACCTTGCCCCAGAGGCCGGTGATGAGCTGCTTCTCC TCGGCTGTCCACTGCACCATGGTGCTGGC	50 (0.000519%)	
TGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGA GTGCACCTCGGGGCTGTACTCCTTACCCA	510 (0.005293%)	
TGGGCGGCCAGGACGACGACCAGGATGTCACCCAGGAGCC	510 (0.002117%)	
TGGGCTTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGC	2978 (0.012363%)	
TGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAG	1358 (0.014094%)	

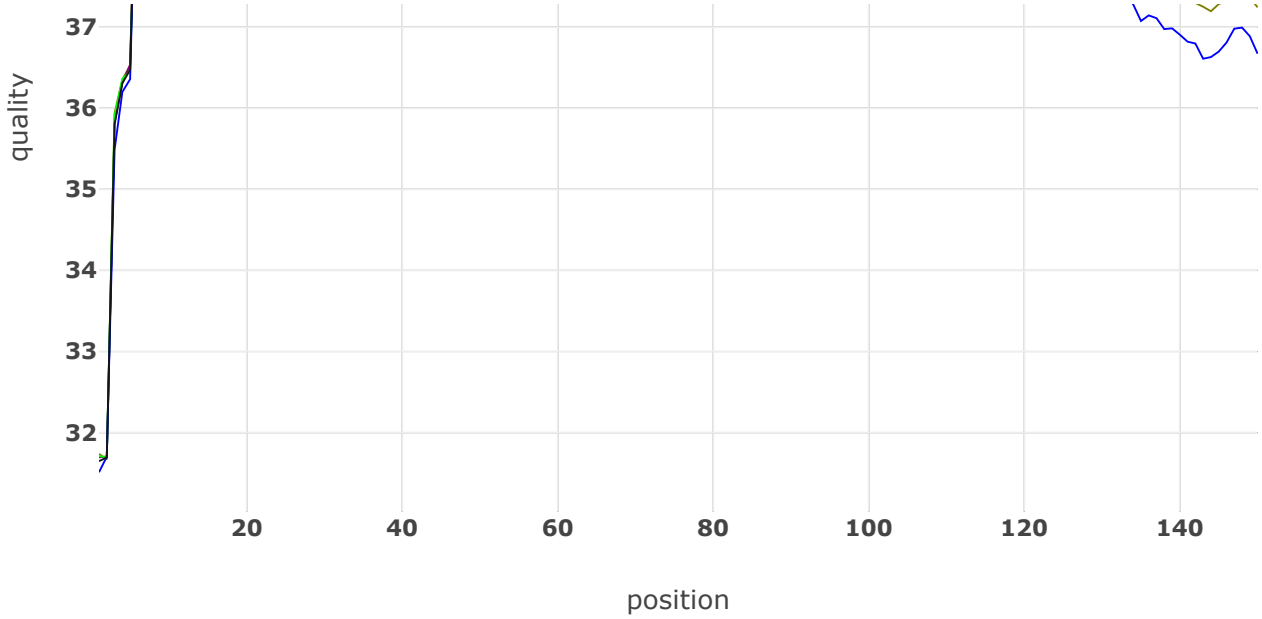
GAACTTGTCCAGGGAAGCGTGGACCTCTG		
TGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTCGGGGCTG	1170 (0.012142%)	
TGGTACTTGCGGGCCAGAGCGTGGGCAACCACACGCACCA	1497 (0.006214%)	
TGGTGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGC	5301 (0.055015%)	
TGGTGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTG	714 (0.007410%)	
TGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGG	156 (0.000648%)	
TGGTTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGC	53 (0.000220%)	
TGTACTCCTTACCCAGGCGGGTAGCCAGCACCACCTGCAA	1282 (0.005322%)	
TGTCACCCAGGAGCCTGAAGTTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTT	382 (0.003964%)	
TGTCCAGGTTCTTGATGGCATTGCCCAGGGCAGCCACCAC	70335 (0.291980%)	
TGTCGGAGGGCTGGTGGTGTGTTGGGTCCAGCTCTGACCA	6247 (0.025933%)	
TGTCGGGCCCGGCGCGGCGGCGCGGCCGGACGCTCCTGTT	453 (0.001881%)	
TGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATGAT	136 (0.001411%)	
TGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCTCAGATG	27 (0.000280%)	
TGTGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGAC	198 (0.002055%)	
TGTTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCT	1121 (0.011634%)	
TTACCCAGGCGGGTAGCCAGCACCACCTGCAAGCACTGCG	133 (0.000552%)	
TTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCGGACG	193 (0.000801%)	
TTAGTGGTACTTGCGGGCCAGAGCGTGGGCAACCACACGC	319 (0.001324%)	
TTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATGAACTTGTCGACGGCAGAGTGCACCTC	69 (0.000716%)	
TTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCG	226 (0.000938%)	
TTCAACCAGTGCAGCTGCCACCTTCTTGCCGTGACCCTTG	341 (0.001416%)	
TTCACAGGGTGAGCTTTATTTGGTTAGAAGCTGTCGGGCC	4697 (0.019499%)	
TTCACGGGGTCCACACGCAGGTTGTAGGCGTGCAGGTTGCTGAGCTCAGACAGAGCCTGGCTGAGGTTGTCCAGGTTCTTGATGGCATTGCCCAGGGCAG	121 (0.001256%)	
TTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCTTCT	291 (0.003020%)	
TTCTCGGGGTCCACGTGCAGCTTGTCGCAGTGCAGCTCGGACAGCTGGGAGAAGGTGTTCTTGATGCTGTCCAGGTTCTTGACGGCCTCCCCGAAGGAGG	115 (0.001193%)	
TTCTTCGAATGTGTGGAATGGGGGAGGGCAGCCGTGGATTCATTCGATGTTCGTGCTTGTTAGTTCTGGCTGAGATGCTTTGCGTTTTGATGCGAAGGCT	39 (0.000405%)	
TTCTTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTGC	690 (0.002864%)	
TTCTTGATGGCATTGCCCAGGGCAGCCACCACTTTCTTGC	369 (0.001532%)	
TTCTTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTA	303 (0.001258%)	
TTCTTGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGG	332 (0.001378%)	
TTCTTTTTTT	153295 (0.159093%)	
TTGACCTGAGCAGAGCCCTTTCCTAGGTCGAAGTGGGGGA	192 (0.000797%)	
TTGACGGCCTCCCCGAAGGAGGTGAGCACCTTCTTGCCGT	168 (0.000697%)	

TTGATGGCATTGCCCAGGGCAGCCACCACTTTCTTGCCAT	113 (0.000469%)	
TTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGACATG AACTTGTCGACGGCAGAGTGCACCTCGGG	179 (0.001858%)	
TTGCACCTTGGGGTTGCCGACGATGGCCGTGGCGCTGGAC	443 (0.001839%)	
TTGCCCAGGGCAGCCACCACTTTCTTGCCATGGCCACGGA	76 (0.000315%)	
TTGCCGAAGTGGGCGGCCAGGACGACGACCAGGATGTCAC	237 (0.000984%)	
TTGCCGTGACCCTTGACCTGAGCAGAGCCCTTTCCTAGGT	422 (0.001752%)	
TTGCCGTGGGCTTGCACCTTGGGGTTGCCGACGATGGCCG	239 (0.000992%)	
TTGCGAGTGGCCACCACCACCAGGAAGCACTGACCCAGCA	1050 (0.004359%)	
TTGCGGGCCAGAGCGTGGGCAACCACACGCACCAGCTTCT	4855 (0.020154%)	
TTGGAGAGGGCACCAGCAATGTCATCAACGTGGTTGGCAG	318 (0.001320%)	
TTGGCAGCTTCAACCAGTGCAGCTGCCACCTTCTTGCCGT	48 (0.000199%)	
TTGGCAGTCAGCACAGTGCCCACGGCACACAGGAACTTGTCCAGGGAAGCGTGGACCTCTGGGGTCAGCAG AGAGGGGTTGCGAGTGGCCACCACCACCA	1063 (0.011032%)	
TTGGGTCCAGCTCTGACCACGGTACACGGCTTAACGGTACTTGGCAGTCAGCACAGTGCCCACGGCACACA GGAACTTGTCCAGGGAAGCGTGGACCTCT	291 (0.003020%)	
TTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCCG	321 (0.001333%)	
TTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCGA CATGAACTTGTCGACGGCAGAGTGCACCT	92 (0.000955%)	
TTTATTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGC	522 (0.002167%)	
TTTCTTTTTT	60158 (0.062433%)	
TTTGGTTAGAAGCTGTCGGGCCCGGCGCGGCGGCGCGGCC	732 (0.003039%)	
TTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCCG ACATGAACTTGTCGACGGCAGAGTGCACC	349 (0.003622%)	
TTTTCTTTTT	434516 (0.450949%)	
TTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGCC GACATGAACTTGTCGACGGCAGAGTGCAC	1882 (0.019532%)	
TTTTTTATTGATGGTACACAGGCATGGCTGACAGCTCATCTGTACTTCTCAGCCAGCACGCTGGCCACGGC CGACATGAACTTGTCGACGGCAGAGTGCA	263 (0.002729%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTA	244 (0.001013%)	

After filtering: read2: quality

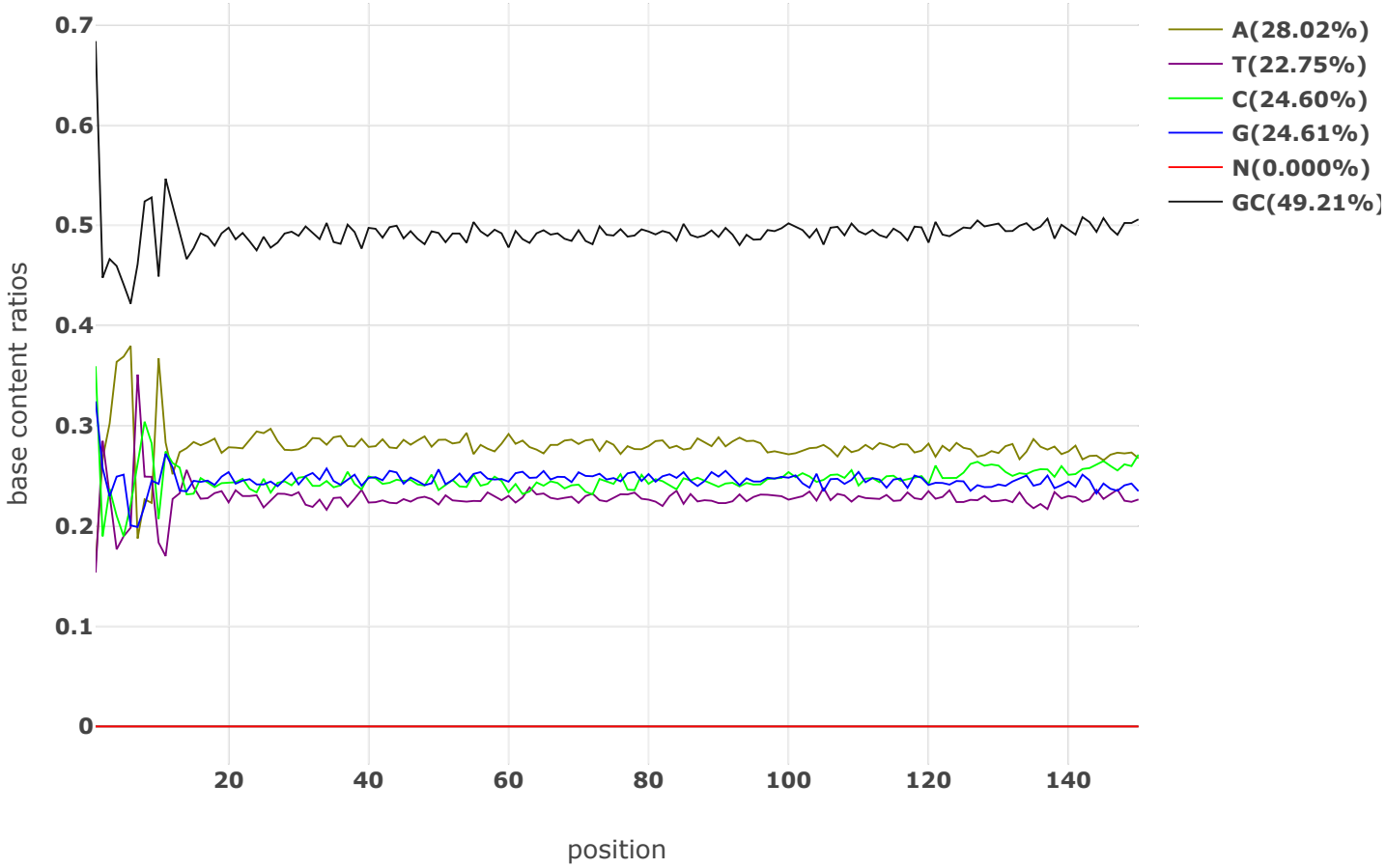
Value of each position will be shown on mouse over.





After filtering: read2: base contents

Value of each position will be shown on mouse over.



After filtering: read2: KMER counting

Darker background means larger counts. The count will be shown on mouse over.

	AA	AT	AC	AG	TA	TT	TC	TG	CA	CT	CC	CG	GA	GT	GC	GG
AAA	AAAAA	AAAAT	AAAAC	AAAAG	AAATA	AAATT	AAATC	AAATG	AAACA	AAACT	AAACC	AAACG	AAAGA	AAAGT	AAAGC	AAAGG
AAT	AATAA	AATAT	AATAC	AATAG	AATTA	AATTT	AATTC	AATTG	AATCA	AATCT	AATCC	AATCG	AATGA	AATGT	AATGC	AATGG
AAC	AACAA	AACAT	AACAC	AACAG	AACTA	AACTT	AACTC	AACTG	AACCA	AACCT	AACCC	AACCG	AACGA	AACGT	AACGC	AACGG
AAG	AAGAA	AAGAT	AAGAC	AAGAG	AAGTA	AAGTT	AAGTC	AAGTG	AAGCA	AAGCT	AAGCC	AAGCG	AAGGA	AAGGT	AAGGC	AAGGG
ATA	ATAAA	ATAAT	ATAAC	ATAAG	ATATA	ATATT	ATATC	ATATG	ATACA	ATACT	ATACC	ATACG	ATAGA	ATAGT	ATAGC	ATAGG
ATT	ATTAA	ATTAT	ATTAC	ATTAG	ATTTA	ATTTT	ATTTC	ATTTG	ATTCA	ATTCT	ATTCC	ATTCG	ATTGA	ATTGT	ATTGC	ATTGG
ATC	ATCAA	ATCAT	ATCAC	ATCAG	ATCTA	ATCTT	ATCTC	ATCTG	ATCCA	ATCCT	ATCCC	ATCCG	ATCGA	ATCGT	ATCGC	ATCGG
ATG	ATGAA	ATGAT	ATGAC	ATGAG	ATGTA	ATGTT	ATGTC	ATGTG	ATGCA	ATGCT	ATGCC	ATGCG	ATGGA	ATGGT	ATGGC	ATGGG
ACA	ACAAA	ACAAT	ACAAC	ACAAG	ACATA	ACATT	ACATC	ACATG	ACACA	ACACT	ACACC	ACACG	ACAGA	ACAGT	ACAGC	ACAGG
ACT	ACTAA	ACTAT	ACTAC	ACTAG	ACTTA	ACTTT	ACTTC	ACTTG	ACTCA	ACTCT	ACTCC	ACTCG	ACTGA	ACTGT	ACTGC	ACTGG
ACC	ACCAA	ACCAT	ACCAC	ACCAG	ACCTA	ACCTT	ACCTC	ACCTG	ACCCA	ACCCT	ACCCC	ACCCG	ACCGA	ACCGT	ACCGC	ACCGG
ACG	ACGAA	ACGAT	ACGAC	ACGAG	ACGTA	ACGTT	ACGTC	ACGTG	ACGCA	ACGCT	ACGCC	ACGCG	ACGGA	ACGGT	ACGGC	ACGGG
AGA	AGAAA	AGAAT	AGAAC	AGAAG	AGATA	AGATT	AGATC	AGATG	AGACA	AGACT	AGACC	AGACG	AGAGA	AGAGT	AGAGC	AGAGG
AGT	AGTAA	AGTAT	AGTAC	AGTAG	AGTTA	AGTTT	AGTTC	AGTTG	AGTCA	AGTCT	AGTCC	AGTCG	AGTGA	AGTGT	AGTGC	AGTGG
AGC	AGCAA	AGCAT	AGCAC	AGCAG	AGCTA	AGCTT	AGCTC	AGCTG	AGCCA	AGCCT	AGCCC	AGCCG	AGCGA	AGCGT	AGCGC	AGCGG
AGG	AGGAA	AGGAT	AGGAC	AGGAG	AGGTA	AGGTT	AGGTC	AGGTG	AGGCA	AGGCT	AGGCC	AGGCG	AGGGA	AGGGT	AGGGC	AGGGG
TAA	TAAAA	TAAAT	TAAAC	TAAAG	TAATA	TAATT	TAATC	TAATG	TAACA	TAACT	TAACC	TAACG	TAAGA	TAAGT	TAAGC	TAAGG
TAT	TATAA	TATAT	TATAC	TATAG	TATTA	TATTT	TATTC	TATTG	TATCA	TATCT	TATCC	TATCG	TATGA	TATGT	TATGC	TATGG
TAC	TACAA	TACAT	TACAC	TACAG	TACTA	TACTT	TACTC	TACTG	TACCA	TACCT	TACCC	TACCG	TACGA	TACGT	TACGC	TACGG
TAG	TAGAA	TAGAT	TAGAC	TAGAG	TAGTA	TAGTT	TAGTC	TAGTG	TAGCA	TAGCT	TAGCC	TAGCG	TAGGA	TAGGT	TAGGC	TAGGG
TTA	TTAAA	TTAAT	TTAAC	TTAAG	TTATA	TTATT	TTATC	TTATG	TTACA	TTACT	TTACC	TTACG	TTAGA	TTAGT	TTAGC	TTAGG
TTT	TTTAA	TTTAT	TTTAC	TTTAG	TTTTA	TTTTT	TTTTC	TTTTG	TTTCA	TTTCT	TTTCC	TTTCG	TTTGA	TTTGT	TTTGC	TTTGG
TTC	TTCAA	TTCAT	TTCAC	TTCAG	TTCTA	TTCTT	TTCTC	TTCTG	TTCCA	TTCCT	TTCCC	TTCCG	TTCGA	TTCGT	TTCGC	TTCGG
TTG	TTGAA	TTGAT	TTGAC	TTGAG	TTGTA	TTGTT	TTGTC	TTGTG	TTGCA	TTGCT	TTGCC	TTGCG	TTGGA	TTGGT	TTGGC	TTGGG
TCA	TCAAA	TCAAT	TCAAC	TCAAG	TCATA	TCATT	TCATC	TCATG	TCACA	TCACT	TCACC	TCACG	TCAGA	TCAGT	TCAGC	TCAGG
TCT	TCTAA	TCTAT	TCTAC	TCTAG	TCTTA	TCTTT	TCTTC	TCTTG	TCTCA	TCTCT	TCTCC	TCTCG	TCTGA	TCTGT	TCTGC	TCTGG
TCC	TCCAA	TCCAT	TCCAC	TCCAG	TCCTA	TCCTT	TCCTC	TCCTG	TCCCA	TCCCT	TCCCC	TCCCG	TCCGA	TCCGT	TCCGC	TCCGG
TCG	TCGAA	TCGAT	TCGAC	TCGAG	TCGTA	TCGTT	TCGTC	TCGTG	TCGCA	TCGCT	TCGCC	TCGCG	TCGGA	TCGGT	TCGGC	TCGGG
TGA	TGAAA	TGAAT	TGAAC	TGAAG	TGATA	TGATT	TGATC	TGATG	TGACA	TGACT	TGACC	TGACG	TGAGA	TGAGT	TGAGC	TGAGG
TGT	TGTAA	TGTAT	TGTAC	TGTAG	TGTTA	TGTTT	TGTTC	TGTTG	TGTCA	TGTCT	TGTCC	TGTCG	TGTGA	TGTGT	TGTGC	TGTGG
TGC	TGCAA	TGCAT	TGCAC	TGCAG	TGCTA	TGCTT	TGCTC	TGCTG	TGCCA	TGCCT	TGCCC	TGCCG	TGCGA	TGCGT	TGCGC	TGCGG
TGG	TGGAA	TGGAT	TGGAC	TGGAG	TGGTA	TGGTT	TGGTC	TGGTG	TGGCA	TGGCT	TGGCC	TGGCG	TGGGA	TGGGT	TGGGC	TGGGG
CAA	CAAAA	CAAAT	CAAAC	CAAAG	CAATA	CAATT	CAATC	CAATG	CAACA	CAACT	CAACC	CAACG	CAAGA	CAAGT	CAAGC	CAAGG
CAT	CATAA	CATAT	CATAC	CATAG	CATTA	CATTT	CATTC	CATTG	CATCA	CATCT	CATCC	CATCG	CATGA	CATGT	CATGC	CATGG
CAC	CACAA	CACAT	CACAC	CACAG	CACTA	CACTT	CACTC	CACTG	CACCA	CACCT	CACCC	CACCG	CACGA	CACGT	CACGC	CACGG
CAG	CAGAA	CAGAT	CAGAC	CAGAG	CAGTA	CAGTT	CAGTC	CAGTG	CAGCA	CAGCT	CAGCC	CAGCG	CAGGA	CAGGT	CAGGC	CAGGG
CTA	CTAAA	CTAAT	CTAAC	CTAAG	CTATA	CTATT	CTATC	CTATG	CTACA	CTACT	CTACC	CTACG	CTAGA	CTAGT	CTAGC	CTAGG
CTT	CTTAA	CTTAT	CTTAC	CTTAG	CTTTA	CTTTT	CTTTC	CTTTG	CTTCA	CTTCT	CTTCC	CTTCG	CTTGA	CTTGT	CTTGC	CTTGG
CTC	CTCAA	CTCAT	CTCAC	CTCAG	CTCTA	CTCTT	CTCTC	CTCTG	CTCCA	CTCCT	CTCCC	CTCCG	CTCGA	CTCGT	CTCGC	CTCGG
CTG	CTGAA	CTGAT	CTGAC	CTGAG	CTGTA	CTGTT	CTGTC	CTGTG	CTGCA	CTGCT	CTGCC	CTGCG	CTGGA	CTGGT	CTGGC	CTGGG
CCA	CCAAA	CCAAT	CCAAC	CCAAG	CCATA	CCATT	CCATC	CCATG	CCACA	CCACT	CCACC	CCACG	CCAGA	CCAGT	CCAGC	CCAGG
CCT	CCTAA	CCTAT	CCTAC	CCTAG	CCTTA	CCTTT	CCTTC	CCTTG	CCTCA	CCTCT	CCTCC	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	CCCTC	CCCTG	CCCCA	CCCCT	CCCCC	CCCCG	CCCGA	CCCGT	CCCGC	CCCGG
CCG	CCGAA	CCGAT	CCGAC	CCGAG	CCGTA	CCGTT	CCGTC	CCGTG	CCGCA	CCGCT	CCGCC	CCGCG	CCGGA	CCGGT	CCGGC	CCGGG
CGA	CGAAA	CGAAT	CGAAC	CGAAG	CGATA	CGATT	CGATC	CGATG	CGACA	CGACT	CGACC	CGACG	CGAGA	CGAGT	CGAGC	CGAGG
CGT	CGTAA	CGTAT	CGTAC	CGTAG	CGTTA	CGTTT	CGTTC	CGTTG	CGTCA	CGTCT	CGTCC	CGTCG	CGTGA	CGTGT	CGTGC	CGTGG
CGC	CGCAA	CGCAT	CGCAC	CGCAG	CGCTA	CGCTT	CGCTC	CGCTG	CGCCA	CGCCT	CGCCC	CGCCG	CGCGA	CGCGT	CGCGC	CGCGG
CGG	CGGAA	CGGAT	CGGAC	CGGAG	CGGTA	CGGTT	CGGTC	CGGTG	CGGCA	CGGCT	CGGCC	CGGCG	CGGGA	CGGGT	CGGGC	CGGGG
GAA	GAAAA	GAAAT	GAAAC	GAAAG	GAATA	GAATT	GAATC	GAATG	GAACA	GAACT	GAACC	GAACG	GAAGA	GAAGT	GAAGC	GAAGG
GAT	GATAA	GATAT	GATAC	GATAG	GATTA	GATTT	GATTC	GATTG	GATCA	GATCT	GATCC	GATCG	GATGA	GATGT	GATGC	GATGG
GAC	GACAA	GACAT	GACAC	GACAG	GACTA	GACTT	GACTC	GACTG	GACCA	GACCT	GACCC	GACCG	GACGA	GACGT	GACGC	GACGG
GAG	GAGAA	GAGAT	GAGAC	GAGAG	GAGTA	GAGTT	GAGTC	GAGTG	GAGCA	GAGCT	GAGCC	GAGCG	GAGGA	GAGGT	GAGGC	GAGGG
GTA	GTAAA	GTAAT	GTAAC	GTAAG	GTATA	GTATT	GTATC	GTATG	GTACA	GTACT	GTACC	GTACG	GTAGA	GTAGT	GTAGC	GTAGG
GTT	GTTAA	GTTAT	GTTAC	GTTAG	GTTTA	GTTTT	GTTTC	GTTTG	GTTCA	GTTCT	GTTCC	GTTCG	GTTGA	GTTGT	GTTGC	GTTGG
GTC	GTCAA	GTCAT	GTCAC	GTCAG	GTCTA	GTCTT	GTCTC	GTCTG	GTCCA	GTCCT	GTCCC	GTCCG	GTCGA	GTCGT	GTCGC	GTCGG
GTG	GTGAA	GTGAT	GTGAC	GTGAG	GTGTA	GTGTT	GTGTC	GTGTG	GTGCA	GTGCT	GTGCC	GTGCG	GTGGA	GTGGT	GTGGC	GTGGG
GCA	GCAAA	GCAAT	GCAAC	GCAAG	GCATA	GCATT	GCATC	GCATG	GCACA	GCACT	GCACC	GCACG	GCAGA	GCAGT	GCAGC	GCAGG
GCT	GCTAA	GCTAT	GCTAC	GCTAG	GCTTA	GCTTT	GCTTC	GCTTG	GCTCA	GCTCT	GCTCC	GCTCG	GCTGA	GCTGT	GCTGC	GCTGG
GCC	GCCAA	GCCAT	GCCAC	GCCAG	GCCTA	GCCTT	GCCTC	GCCTG	GCCCA	GCCCT	GCCCC	GCCCG	GCCGA	GCCGT	GCCGC	GCCGG
GCG	GCGAA	GCGAT	GCGAC	GCGAG	GCGTA	GCGTT	GCGTC	GCGTG	GCGCA	GCGCT	GCGCC	GCGCG	GCGGA	GCGGT	GCGGC	GCGGG
GGA	GGAAA	GGAAT	GGAAC	GGAAG	GGATA	GGATT	GGATC	GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGAGG
GGT	GGTAA	GGTAT	GGTAC	GGTAG	GGTTA	GGTTT	GGTTC	GGTTG	GGTCA	GGTCT	GGTCC	GGTCG	GGTGA	GGTGT	GGTGC	GGTGG
GGC	GGCAA	GGCAT	GGCAC	GGCAG	GGCTA	GGCTT	GGCTC	GGCTG	GGCCA	GGCCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGCGG
GGG	GGGAA	GGGAT	GGGAC	GGGAG	GGGTA	GGGTT	GGGTC	GGGTG	GGGCA	GGGCT	GGGCC	GGGCG	GGGGA	GGGGT	GGGGC	GGGGG

After filtering: read2: overrepresented sequences

Sampling rate: 1 / 20

overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 150
AAAAAAAAAG	116858 (0.121202%)	
AAAAAAAAGA	83680 (0.086791%)	
AAAAAAAAGAAGGATAAAGGGAGAAAAAAGGAAGAAAAAT	15363 (0.063737%)	
AAAAAAAGAA	202802 (0.210342%)	
AAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAAGATG	3696 (0.015334%)	
AAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAATAGAAGACAGGAAAAATG	34920 (0.362182%)	
AAAAAAAGAAAATAGAAAATTATAGAAAAAAAGAAAAACC	778 (0.003228%)	
AAAAAAAGAAAATAGAAAATTGTAGAAAAAAAGAAAAACC	1348 (0.005592%)	
AAAAAAAGAAGGATAAAGGGAGAAAAAAGGAAGAAAAATC	1461 (0.006061%)	

AAAAAAGAAA	193639 (0.200838%)	
AAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAG AGAGAAAAAATAGAAGACAGGAAAAATGA	989 (0.010258%)	
AAAAAAGAAAATAGAAAATTATAGAAAAAAAGAAAAACCC	249 (0.001033%)	
AAAAAAGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCC	454 (0.001884%)	
AAAAAAGAAATTAGAATATAGAAAAAAATAAAGAAGAAAA	658 (0.002730%)	
AAAAAATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAG	36782 (0.152598%)	
AAAAAATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGA	4395 (0.018234%)	
AAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGA	3545 (0.014707%)	
AAAAACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAA AAATAGAAGACAGGAAAAATGAGAGAAAA	597 (0.006192%)	
AAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGC AACCCCTCTCTGCTGACCCCAGAGGTCCA	2204 (0.022859%)	
AAAAAGAAAA	68711 (0.071266%)	
AAAAAGAAAATAGAAAATTATAGAAAAAAAGAAAAACCCA	47 (0.000195%)	
AAAAAGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCA	91 (0.000378%)	
AAAAAGAAATTAGAATATAGAAAAAAATAAAGAAGAAAAT	75 (0.000311%)	
AAAAAGGAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGG	30763 (0.127627%)	
AAAAATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGA	347 (0.001440%)	
AAAAATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAG	439 (0.001821%)	
AAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAA	761 (0.003157%)	
AAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAA	232 (0.000963%)	
AAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAA	255 (0.001058%)	
AAAACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAA AATAGAAGACAGGAAAAATGAGAGAAAA	522 (0.005414%)	
AAAAGAAAATAGAAAATTATAGAAAAAAAGAAAAACCCAA	87 (0.000361%)	
AAAAGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAA	151 (0.000626%)	
AAAAGGAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGA	369 (0.001531%)	
AAAATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCT	121 (0.000502%)	
AAAATAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCT	140 (0.000581%)	
AAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCT	145 (0.000602%)	
AAAATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAG	273 (0.001133%)	
AAAATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGG	378 (0.001568%)	
AAAATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAA	360 (0.001494%)	
AAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAA	185 (0.000768%)	
AAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAA	142 (0.000589%)	
AAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAAT	197 (0.000817%)	
AAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATT	107 (0.000444%)	

AAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATT	159 (0.000660%)	
AAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAA	416 (0.001726%)	
AAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATT	103 (0.000427%)	
AAACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAA ATAGAAGACAGGAAAAATGAGAGAAAAAA	66 (0.000685%)	
AAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTC	762 (0.003161%)	
AAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCA CGCTTCCCTGGACAAGTTCCTGTGTGCCG	624 (0.006472%)	
AAAGAAAATAGAAAATTATAGAAAAAAAGAAAAACCCAAG	148 (0.000614%)	
AAAGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAG	257 (0.001066%)	
AAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAATG	16604 (0.068885%)	
AAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGA	639 (0.002651%)	
AAAGGAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGAA	253 (0.001050%)	
AAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTG	1011 (0.004194%)	
AAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAG CAACCTGCACGCCTACAACCTGCGTGTGG	512 (0.005310%)	
AAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAA	218 (0.000904%)	
AAATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTG	37 (0.000154%)	
AAATAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTG	46 (0.000191%)	
AAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTG	80 (0.000332%)	
AAATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGG	103 (0.000427%)	
AAATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGA	121 (0.000502%)	
AAATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAG	186 (0.000772%)	
AAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAA	154 (0.000639%)	
AAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTA	237 (0.000983%)	
AAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAAT	185 (0.000768%)	
AAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATA	214 (0.000888%)	
AAATTAGAATATAGAAAAAAATAAAGAAGAAAATTGGAAA	181 (0.000751%)	
AAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTT	372 (0.001543%)	
AAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTT	312 (0.001294%)	
AAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAG	154 (0.000639%)	
AAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTT	289 (0.001199%)	
AACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGC	105774 (0.438826%)	
AACCACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCA	1170 (0.004854%)	
AACCACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCA	1371 (0.005688%)	
AACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAA	39 (0.000404%)	

TAGAAGACAGGAAAAATGAGAGAAAAAAT		
AACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCT	42331 (0.175619%)	
AACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAG CATCAAGAACACCTTCTCCCAGCTGTCCG	75 (0.000778%)	
AACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCT GACTGCCAAGTACCGTTAAGCCGTGTACC	691 (0.007167%)	
AACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTT CAAGTTCCTGTCGCAGTGCTTGCAGGTGG	122 (0.001265%)	
AACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCC CGAGAACTTCAGGCTCCTGGGTGACATCC	696 (0.007219%)	
AACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTC CTTCGGGGAGGCCGTCAAGAACCTGGACA	372 (0.003858%)	
AACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGAT GTTCACCACCTACCCCCAGACCAAGACCT	155 (0.001608%)	
AACTAGGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATG GTCGCCCTAGCCATTTGCACCCTAGTCTT	9321 (0.096675%)	
AACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAAC CCCTCTCTGCTGACCCCAGAGGTCCACGC	2964 (0.030742%)	
AACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCG	472 (0.001958%)	
AACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCAC GCTTCCCTGGACAAGTTCCTGTGTGCCGT	293 (0.003039%)	
AACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGG	331 (0.001373%)	
AACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGA GGTCCACGCTTCCCTGGACAAGTTCCTGT	214 (0.002220%)	
AACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGG	240 (0.000996%)	
AACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGA CTGCCAGGCTGCCTGGCAGAAGCTGGTGC	41 (0.000425%)	
AACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCA	257 (0.001066%)	
AAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGAAAATTT	174 (0.000722%)	
AAGAAAATAGAAAATTATAGAAAAAAAGAAAAACCCAAGT	126 (0.000523%)	
AAGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGT	215 (0.000892%)	
AAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCT CAGCAACCTGCACGCCTACAACCTGCGTG	1369 (0.014199%)	
AAGAAATTAGAATATAGAAAAAAATAAAGAAGAAAATTGG	881 (0.003655%)	
AAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGA CCCCGAGAACTTCAGGCTCCTGGGTGACA	390 (0.004045%)	
AAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCT GTCCGAGCTGCACTGCGACAAGCTGCACG	232 (0.002406%)	
AAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACG	2361 (0.009795%)	
AAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAG	136 (0.000564%)	
AAGACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGA	146 (0.000606%)	
AAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGC AGCTGCACTGGTTGAAGCTGCCAACCACG	366 (0.003796%)	
AAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGT GGCTGCCCTGGGCAATGCCATCAAGAACC	323 (0.003350%)	
AAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAG	3191 (0.013239%)	
AAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCG AGGAGAAGCAGCTCATCACCGGCCTCTGG	328 (0.003402%)	
AAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGG	595 (0.002468%)	
AAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAATGA	318 (0.001319%)	
AAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTC	21 (0.000087%)	

AAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCAT	212 (0.000880%)	
AAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACC TTCTCCCAGCTGTCCGAGCTGCACTGCGA	44 (0.000456%)	
AAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAACT	72 (0.000299%)	
AAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAGAA	114 (0.000473%)	
AAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTT CCTGGTGGTGGTGGCCACTCGCAACCCCT	327 (0.003392%)	
AAGCTGCCAACCACGTCGATGACATTGCTGGTGCCCTCTC	184 (0.000763%)	
AAGCTGCCAACCACGTTGATGACATTGCTGGTGCCCTCTC	23763 (0.098586%)	
AAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGT	1039 (0.004311%)	
AAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAA	610 (0.002531%)	
AAGGAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGAAA	194 (0.000805%)	
AAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGC	1189 (0.004933%)	
AAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGA GAAGTACAGATGAGCTGTCAGCCATGCCT	480 (0.004978%)	
AAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCAC CACCTACCCCCAGACCAAGACCTACTTCC	141 (0.001462%)	
AAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGG	620 (0.002572%)	
AAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAG	166 (0.000689%)	
AAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCG	764 (0.003170%)	
AAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTC CGAGCTGCACTGCGACAAGCTGCACGTGG	381 (0.003952%)	
AAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCG	751 (0.003116%)	
AAGTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCGCCG	660 (0.002738%)	
AAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGCGCTG	701 (0.002908%)	
AAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCC	1030 (0.004273%)	
AAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGC AACCTGCACGCCTACAACCTGCGTGTGGA	205 (0.002126%)	
AAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCC	1534 (0.006364%)	
AAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGT	436 (0.001809%)	
AAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAG	230 (0.000954%)	
AATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGA	28 (0.000116%)	
AATAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGA	43 (0.000178%)	
AATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGA	48 (0.000199%)	
AATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGA	63 (0.000261%)	
AATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGAT	78 (0.000324%)	
AATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGG	807 (0.003348%)	
AATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAAT	219 (0.000909%)	
AATCATGCTAATCTTCATCATCTGAGAAGCCTTCGCATCA	163 (0.000676%)	

AATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTAC	307 (0.001274%)	
AATCTTCATCATCTGAGAAGCCTTCGCATCAAAACGCAAA	13841 (0.057422%)	
AATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATA	83 (0.000344%)	
AATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAG	97 (0.000402%)	
AATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCC	112 (0.001162%)	
AATTAGAATATAGAAAAAAATAAAGAAGAAAATTGGAAAA	98 (0.000407%)	
AATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTG	3777 (0.015670%)	
AATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTG	8710 (0.036135%)	
AATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGT	76 (0.000315%)	
AATTGGGAAAAATGAAAATAGAAAAAAAGAAAATAGAAAA	427 (0.001771%)	
AATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTG	6750 (0.028004%)	
AATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATG	55 (0.000228%)	
ACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCAGAC	98 (0.001016%)	
ACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAA	444 (0.001842%)	
ACAATTGGGAAAAATGAAAATAGAAAAAAAGAAAATAGAA	81 (0.000336%)	
ACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCT	720 (0.002987%)	
ACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACC	5341 (0.055396%)	
ACAGCCGTAATCATGCTAATCTTCATCATCTGAGAAGCCT	47 (0.000195%)	
ACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGG	17 (0.000071%)	
ACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGA	18 (0.000075%)	
ACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAG	337 (0.003495%)	
ACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGA	132 (0.000548%)	
ACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGC	669 (0.002775%)	
ACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGT	27 (0.000280%)	
ACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGA	99 (0.001027%)	
ACCACCTACCCCCAGACCAAGACCTACTTCCCCCACTTCG	522 (0.002166%)	
ACCACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAG	162 (0.000672%)	
ACCACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAG	185 (0.000768%)	
ACCCAACACACCACCAGCCCTCCGACAGCGAGCAGTCAAA	21 (0.000087%)	
ACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAAATC	23 (0.000239%)	
ACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTC	459 (0.001904%)	
ACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGA	94 (0.000975%)	
ACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCG	52 (0.000539%)	

TTAAGCCGTGTACCGTGGTCAGAGCTGGA		
ACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGC AAGAAGGTGGCAGCTGCACTGGTTGAAGC	11 (0.000114%)	
ACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGC AAGAAAGTGGTGGCTGCCCTGGGCAATGC	15 (0.000156%)	
ACCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGT	957 (0.003970%)	
ACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTG ACTGCCAAGTACCGTTAAGCCGTGTACCG	203 (0.002105%)	
ACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAG CGTGCTGGCTGAGAAGTACAGATGAGCTG	96 (0.000996%)	
ACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGT	368 (0.001527%)	
ACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTA CCCCTGGACCCAGAGGTTCTTCGCCAACT	293 (0.003039%)	
ACCTACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCA CGGCAAGAAGGTGGCAGCTGCACTGGTTG	150 (0.001556%)	
ACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAA	1060 (0.004398%)	
ACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCC AACCACGTTGATGACATTGCTGGTGCCCT	32 (0.000332%)	
ACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCC GAGAACTTCAGGCTCCTGGGTGACATCCT	291 (0.003018%)	
ACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCC TTCGGGGAGGCCGTCAAGAACCTGGACAG	108 (0.001120%)	
ACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCC ACTCGCAACCCCTCTCTGCTGACCCCAGA	130 (0.001348%)	
ACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGC	557 (0.002311%)	
ACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGT	394 (0.001635%)	
ACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGT	683 (0.002834%)	
ACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTAC CGTGGTCAGAGCTGGACCCAACACACCAC	444 (0.004605%)	
ACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCC CAGCTGTCCGAGCTGCACTGCGACAAGCT	346 (0.003589%)	
ACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAA	590 (0.002448%)	
ACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCA	238 (0.000987%)	
ACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGT CAAGAACCTGGACAGCATCAAGAACACCT	10540 (0.109319%)	
ACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATG TTCACCACCTACCCCCAGACCAAGACCTA	87 (0.000902%)	
ACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGA	3390 (0.014064%)	
ACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGA	3795 (0.015744%)	
ACTAGGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGG TCGCCCTAGCCATTTGCACCCTAGTCTTA	33 (0.000342%)	
ACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCG GCGGCCAGGCCGAGGAATATGGCGCCGAC	129 (0.001338%)	
ACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTG	1252 (0.005194%)	
ACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCAC TGTGCTGACTGCCAAGTACCGTTAAGCCG	742 (0.007696%)	
ACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGC CATGCCTGTGTACCATCAATAAAAAATAC	50 (0.000519%)	
ACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGC	112 (0.000465%)	
ACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGC	183 (0.000759%)	
ACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACG CTTCCCTGGACAAGTTCCTGTGTGCCGTG	102 (0.001058%)	
ACTGGTTGAAGCTGCCAACCACGTCGATGACATTGCTGGT	297 (0.001232%)	

ACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGC	218 (0.000904%)	
ACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTG	94 (0.000975%)	
ACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGT	1481 (0.006144%)	
ACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGC	1612 (0.006688%)	
ACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCG	196 (0.002033%)	
ACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTTGATGA	644 (0.006679%)	
ACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAA	2528 (0.026220%)	
ACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTTGATGACATTGCTGG	34 (0.000353%)	
ACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTG	2901 (0.012035%)	
ACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAA	200 (0.000830%)	
AGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAAGA	229 (0.000950%)	
AGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAATCAAA	437 (0.001813%)	
AGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCG	91 (0.000378%)	
AGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGG	211 (0.000875%)	
AGAAAATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTG	730 (0.003029%)	
AGAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTG	1247 (0.005173%)	
AGAAAATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATA	2252 (0.009343%)	
AGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAA	171 (0.000709%)	
AGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAA	434 (0.001801%)	
AGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAA	1113 (0.004618%)	
AGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGT	846 (0.008775%)	
AGAAATTAGAATATAGAAAAAAATAAAGAAGAAAATTGGA	426 (0.001767%)	
AGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGGCTCCTGGGTGACAT	1060 (0.010994%)	
AGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCT	1688 (0.007003%)	
AGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGT	1035 (0.010735%)	
AGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTT	289 (0.001199%)	
AGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTA	360 (0.001494%)	
AGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAG	2336 (0.009691%)	
AGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAA	221 (0.000917%)	
AGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAG	218 (0.000904%)	
AGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAA	5925 (0.024581%)	
AGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAAAAACAGGAGCGTCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTC	201 (0.002085%)	
AGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTG	563 (0.005839%)	

TCCGAGCTGCACTGCGACAAGCTGCACGT		
AGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGT	1812 (0.007517%)	
AGAATATAGAAAAAAATAAAGAAGAAAATTGGAAAATAGA	576 (0.002390%)	
AGACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGA	114 (0.000473%)	
AGACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAG	133 (0.000552%)	
AGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCA GCTGCACTGGTTGAAGCTGCCAACCACGT	70 (0.000726%)	
AGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTG GCTGCCCTGGGCAATGCCATCAAGAACCT	69 (0.000716%)	
AGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAATCA	64 (0.000266%)	
AGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAG	26 (0.000108%)	
AGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGC	38 (0.000158%)	
AGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGA	2666 (0.011060%)	
AGAGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAAT	39538 (0.164032%)	
AGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGA GGAGAAGCAGCTCATCACCGGCCTCTGGG	383 (0.003972%)	
AGAGCTGGACCCAACACACCACCAGCCCTCCGACAGCGAG	51 (0.000212%)	
AGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAGAA	258 (0.001070%)	
AGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGG	565 (0.002344%)	
AGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAA	279 (0.001157%)	
AGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTG	1212 (0.005028%)	
AGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAG CCGTGTACCGTGGTCAGAGCTGGACCCAA	985 (0.010216%)	
AGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGG CCAGGCCGAGGAATATGGCGCCGACGCCC	4353 (0.045148%)	
AGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCT	111 (0.000461%)	
AGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAG CAGCTCATCACCGGCCTCTGGGGCAAGGT	1167 (0.012104%)	
AGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGC CAGGCTCTGTCTGAGCTCAGCAACCTGCA	487 (0.005051%)	
AGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATT	408 (0.001693%)	
AGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAG CCGAGGAGAAGCAGCTCATCACCGGCCTC	439 (0.004553%)	
AGCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAA	268 (0.001112%)	
AGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTT CCTGTCGCAGTGCTTGCAGGTGGTGCTGG	295 (0.003060%)	
AGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCT TCTCCCAGCTGTCCGAGCTGCACTGCGAC	26 (0.000270%)	
AGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGG AGAAGCAGCTCATCACCGGCCTCTGGGGC	66 (0.000685%)	
AGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAG ATGAGCTGTCAGCCATGCCTGTGTACCAT	599 (0.006213%)	
AGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCG	596 (0.002473%)	
AGCCGTAATCATGCTAATCTTCATCATCTGAGAAGCCTTC	53 (0.000220%)	
AGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAACTA	100 (0.000415%)	
AGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCC	1000 (0.004149%)	

AGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCG GCCTCTGGGGCAAGGTCAACGTGGCCGAG	150 (0.001556%)	
AGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAGAAA	114 (0.000473%)	
AGCGTCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCT	47473 (0.196952%)	
AGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTC CTGGTGGTGGTGGCCACTCGCAACCCCTC	1632 (0.016927%)	
AGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTG ATCGTCTACCCCTGGACCCAGAGGTTCTT	1104 (0.011450%)	
AGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTT	2227 (0.009239%)	
AGCTGCACTGGTTGAAGCTGCCAACCACGTCGATGACATT	470 (0.001950%)	
AGCTGCCAACCACGTCGATGACATTGCTGGTGCCCTCTCC	837 (0.003472%)	
AGCTGCCAACCACGTTGATGACATTGCTGGTGCCCTCTCC	907 (0.003763%)	
AGCTGGACCCAACACACCACCAGCCCTCCGACAGCGAGCA	29 (0.000120%)	
AGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTA	3100 (0.012861%)	
AGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCC	1107 (0.004593%)	
AGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAG	108 (0.000448%)	
AGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGA	146 (0.000606%)	
AGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGG	34 (0.000141%)	
AGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAG	184 (0.000763%)	
AGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAA	172 (0.000714%)	
AGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTC	2402 (0.009965%)	
AGGAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGAAAA	740 (0.003070%)	
AGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCT	3174 (0.013168%)	
AGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAGAAGG	209 (0.000867%)	
AGGAGCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGT	198 (0.000821%)	
AGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAA	46 (0.000191%)	
AGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCA	49 (0.000203%)	
AGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAG AAGTACAGATGAGCTGTCAGCCATGCCTG	89 (0.000923%)	
AGGATGTTCCACTCCTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCA GATCCGTGGCCATGGCAAGAAAGTGGTGG	210 (0.002178%)	
AGGATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAA	689 (0.002858%)	
AGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGACCAA	79 (0.000328%)	
AGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACC ACCTACCCCCAGACCAAGACCTACTTCCC	51 (0.000529%)	
AGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCC	2189 (0.009082%)	
AGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCA GGCTGCCTGGCAGAAGCTGGTGCGTGTGG	228 (0.002365%)	
AGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTG TCGCAGTGCTTGCAGGTGGTGCTGGCTAC	112 (0.001162%)	
AGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGC	21113 (0.087592%)	

AGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGG	143 (0.000593%)	
AGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGG	51 (0.000212%)	
AGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGC	161 (0.000668%)	
AGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGC	98 (0.000407%)	
AGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGT	123 (0.000510%)	
AGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGG	196 (0.000813%)	
AGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCC GTGTACCGTGGTCAGAGCTGGACCCAACA	75 (0.000778%)	
AGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCC AGGCCGAGGAATATGGCGCCGACGCCCTG	407 (0.004221%)	
AGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCT GTCAGCCATGCCTGTGTACCATCAATAAA	22 (0.000228%)	
AGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCC GAGCTGCACTGCGACAAGCTGCACGTGGA	277 (0.002873%)	
AGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGA	577 (0.002394%)	
AGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCC	327 (0.001357%)	
AGGTTCACTCATCTCCCTCACAGCCGTAATCATGCTAATC	45 (0.000187%)	
AGGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCG CCCTAGCCATTTGCACCCTAGTCTTATAC	45 (0.000467%)	
AGTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCGCCGC	622 (0.002580%)	
AGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGCGCTGC	628 (0.002605%)	
AGTAGGTTCACTCATCTCCCTCACAGCCGTAATCATGCTA	557 (0.002311%)	
AGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCC	117 (0.000485%)	
AGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTC	50 (0.000207%)	
AGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTC GGGAACCTGTCCAGCGCCACGGCCATCGT	136 (0.001411%)	
AGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCT	2207 (0.009156%)	
AGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGAC AAGTTCCTGTGTGCCGTGGGCACTGTGCT	1988 (0.020619%)	
AGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGA	1050 (0.004356%)	
AGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCA ACCTGCACGCCTACAACCTGCGTGTGGAC	160 (0.001659%)	
AGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCA GCTCATCACCGGCCTCTGGGGCAAGGTCA	903 (0.009366%)	
AGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCG	1406 (0.005833%)	
AGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTA	291 (0.001207%)	
AGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAGG	6406 (0.026577%)	
ATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAA	109 (0.000452%)	
ATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAA	29 (0.000120%)	
ATAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAA	33 (0.000137%)	
ATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAA	60 (0.000249%)	
ATAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGAT	213 (0.000884%)	

ATAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGATT	230 (0.000954%)	
ATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGG	1256 (0.005211%)	
ATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATA	322 (0.001336%)	
ATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTCGC	336 (0.003485%)	
ATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCA	256 (0.002655%)	
ATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTC	611 (0.002535%)	
ATCATGCTAATCTTCATCATCTGAGAAGCCTTCGCATCAA	70 (0.000290%)	
ATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGA	1109 (0.011502%)	
ATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACG	174 (0.001805%)	
ATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACT	426 (0.001767%)	
ATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACC	802 (0.003327%)	
ATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGG	722 (0.002995%)	
ATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGC	213 (0.000884%)	
ATCTTCATCATCTGAGAAGCCTTCGCATCAAAACGCAAAG	249 (0.001033%)	
ATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGG	384 (0.001593%)	
ATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCA	905 (0.003755%)	
ATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAG	103 (0.000427%)	
ATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGA	96 (0.000398%)	
ATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCT	366 (0.003796%)	
ATGCTAATCTTCATCATCTGAGAAGCCTTCGCATCAAAAC	75 (0.000311%)	
ATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCT	127 (0.001317%)	
ATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGT	514 (0.005331%)	
ATGTTCACCACCTACCCCCAGACCAAGACCTACTTCCCCC	65160 (0.270330%)	
ATTAGAATATAGAAAAAAATAAAGAAGAAAATTGGAAAAT	205 (0.000850%)	
ATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGA	125 (0.000519%)	
ATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGA	193 (0.000801%)	
ATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTT	133 (0.000552%)	
ATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCC	2258 (0.009368%)	
ATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGG	1910 (0.019810%)	
ATTGGGAAAAATGAAAATAGAAAAAAAGAAAATAGAAAAT	268 (0.001112%)	
ATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGA	176 (0.000730%)	
ATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAA	1215 (0.005041%)	
ATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGA	125 (0.000519%)	

CAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCG CAACCCCTCTCTGCTGACCCCAGAGGTCC	6903 (0.071596%)	
CAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACT	1880 (0.007800%)	
CAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCC ACGCTTCCCTGGACAAGTTCCTGTGTGCC	1616 (0.016761%)	
CAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAAT	259 (0.001075%)	
CAACACACCACCAGCCCTCCGACAGCGAGCAGTCAAATGT	112 (0.000465%)	
CAACCACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTC	603 (0.002502%)	
CAACCACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTC	824 (0.003419%)	
CAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACC	948 (0.003933%)	
CAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACA GCATCAAGAACACCTTCTCCCAGCTGTCC	597 (0.006192%)	
CAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGC TGACTGCCAAGTACCGTTAAGCCGTGTAC	1173 (0.012166%)	
CAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACT TCAAGTTCCTGTCGCAGTGCTTGCAGGTG	10086 (0.104610%)	
CAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGA TGTTCACCACCTACCCCCAGACCAAGACC	706 (0.007322%)	
CAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTG	2811 (0.011662%)	
CAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAG AGGTCCACGCTTCCCTGGACAAGTTCCTG	2478 (0.025701%)	
CAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGC	335 (0.001390%)	
CAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGC TCAGCAACCTGCACGCCTACAACCTGCGT	1692 (0.017549%)	
CAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGG ACCCCGTGAACTTCAAGTTCCTGTCGCAG	2632 (0.027299%)	
CAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGG ACCCCGAGAACTTCAGGCTCCTGGGTGAC	2235 (0.023181%)	
CAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGC TGTCCGAGCTGCACTGCGACAAGCTGCAC	1460 (0.015143%)	
CAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCAC	3370 (0.013981%)	
CAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGG CAGCTGCACTGGTTGAAGCTGCCAACCAC	936 (0.009708%)	
CAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGG TGGCTGCCCTGGGCAATGCCATCAAGAAC	620 (0.006431%)	
CAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCC GAGGAGAAGCAGCTCATCACCGGCCTCTG	1320 (0.013691%)	
CAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACAC CTTCTCCCAGCTGTCCGAGCTGCACTGCG	245 (0.002541%)	
CAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCT TCCTGGTGGTGGTGGCCACTCGCAACCCC	2237 (0.023202%)	
CAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAG	2419 (0.010036%)	
CAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCA CCACCTACCCCCAGACCAAGACCTACTTC	882 (0.009148%)	
CAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAA	551 (0.002286%)	
CAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTC	6455 (0.026780%)	
CAAGTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCGCC	631 (0.002618%)	
CAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGCGCT	743 (0.003082%)	
CAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAATAGA AGACAGGAAAAATGAGAGAAAAAATCAAA	435 (0.004512%)	
CAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACC	3584 (0.014869%)	

CAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAG	1651 (0.006850%)	
CAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACC TGCGTGTGGACCCCGTGAACTTCAAGTTC	211 (0.002188%)	
CAATTGGGAAAAATGAAAATAGAAAAAAAGAAAATAGAAA	799 (0.003315%)	
CAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGAT	1037 (0.004302%)	
CACAGCCGTAATCATGCTAATCTTCATCATCTGAGAAGCC	313 (0.001299%)	
CACCACCTACCCCCAGACCAAGACCTACTTCCCCCACTTC	1069 (0.004435%)	
CACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCT ACCCCTGGACCCAGAGGTTCTTCGCCAAC	561 (0.005819%)	
CACCTACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTC ACGGCAAGAAGGTGGCAGCTGCACTGGTT	23111 (0.239702%)	
CACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTG	1222 (0.005070%)	
CACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGC CACTCGCAACCCCTCTCTGCTGACCCCAG	2835 (0.029404%)	
CACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAG	2658 (0.011027%)	
CACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTG	3525 (0.014624%)	
CACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTA CCGTGGTCAGAGCTGGACCCAACACACCA	2970 (0.030804%)	
CACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTC CCAGCTGTCCGAGCTGCACTGCGACAAGC	1328 (0.013774%)	
CACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCA	26055 (0.108095%)	
CACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGC	1312 (0.005443%)	
CACGGCTGCCCTCCCCCATTCCACACATTCGAAGAACCAG	22757 (0.094412%)	
CACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTG	474 (0.001966%)	
CACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTG	578 (0.002398%)	
CACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGT	846 (0.003510%)	
CACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCA CTGTGCTGACTGCCAAGTACCGTTAAGCC	4474 (0.046403%)	
CACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAG CCATGCCTGTGTACCATCAATAAAAAATA	108 (0.001120%)	
CACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGGC	531 (0.002203%)	
CACTGGTTGAAGCTGCCAACCACGTCGATGACATTGCTGG	1621 (0.006725%)	
CACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGA AGCTGCCAACCACGTTGATGACATTGCTG	64 (0.000664%)	
CACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCT	3313 (0.013745%)	
CAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCA	3884 (0.016114%)	
CAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAAAAACAGGAGCGTCCGG CCGCGCCGCCGCGCCGGGCCCGACAGCTT	17305 (0.179484%)	
CAGAGCCAAGTCCGGTGCCCGGAAATCGCCCAAGAAGAAG	436 (0.001809%)	
CAGAGCTGGACCCAACACACCACCAGCCCTCCGACAGCGA	118 (0.000490%)	
CAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGT	73797 (0.306162%)	
CAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAA GCCGTGTACCGTGGTCAGAGCTGGACCCA	19149 (0.198609%)	
CAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCG	1314 (0.013629%)	

GCCAGGCCGAGGAATATGGCGCCGACGCC		
CAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGG	5578 (0.057854%)	
CAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGC	1291 (0.013390%)	
CAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCG	2957 (0.030669%)	
CAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTG	860 (0.008920%)	
CAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCA	1526 (0.015827%)	
CAGCCGTAATCATGCTAATCTTCATCATCTGAGAAGCCTT	168 (0.000697%)	
CAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCC	1023 (0.004244%)	
CAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGA	671 (0.006959%)	
CAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCT	37827 (0.392333%)	
CAGCTGCACTGGTTGAAGCTGCCAACCACGTCGATGACAT	1616 (0.006704%)	
CAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACC	1398 (0.005800%)	
CAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGA	114 (0.000473%)	
CAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAG	144 (0.000597%)	
CAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCC	3052 (0.012662%)	
CAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTG	1580 (0.016387%)	
CAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTA	423 (0.004387%)	
CAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACG	2557 (0.010608%)	
CAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGG	147 (0.000610%)	
CAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGG	229 (0.000950%)	
CAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCC	280 (0.001162%)	
CAGTAGGTTCACTCATCTCCCTCACAGCCGTAATCATGCT	181 (0.000751%)	
CAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTG	634 (0.006576%)	
CAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTC	1646 (0.006829%)	
CAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGC	1469 (0.015236%)	
CAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGG	580 (0.002406%)	
CATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTCG	596 (0.006182%)	
CATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCC	345 (0.003578%)	
CATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCT	750 (0.003112%)	
CATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGG	1655 (0.017165%)	
CATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGAC	492 (0.002041%)	
CATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAG	162 (0.000672%)	
CATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAG	108 (0.000448%)	
CATGCTAATCTTCATCATCTGAGAAGCCTTCGCATCAAAA	85 (0.000353%)	

CATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTC TGAGCTCAGCAACCTGCACGCCTACAACC	236 (0.002448%)	
CATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGG AATATGGCGCCGACGCCCTGGAGAGGATG	1347 (0.013971%)	
CATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCC	1341 (0.005563%)	
CATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCA AACTGCTGGGTCAGTGCTTCCTGGTGGTG	758 (0.007862%)	
CCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTC GCAACCCCTCTCTGCTGACCCCAGAGGTC	4163 (0.043178%)	
CCAACACACCACCAGCCCTCCGACAGCGAGCAGTCAAATG	47 (0.000195%)	
CCAACCACGTCGATGACATTGCTGGTGCCCTCTCCAAGCT	146 (0.000606%)	
CCAACCACGTTGATGACATTGCTGGTGCCCTCTCCAAGCT	134 (0.000556%)	
CCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGG ATGTTCACCACCTACCCCCAGACCAAGAC	972 (0.010081%)	
CCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGG	79067 (0.328026%)	
CCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTG GCAGCTGCACTGGTTGAAGCTGCCAACCA	4757 (0.049339%)	
CCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTG GTGGCTGCCCTGGGCAATGCCATCAAGAA	2989 (0.031001%)	
CCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGC TTCCTGGTGGTGGTGGCCACTCGCAACCC	1213 (0.012581%)	
CCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATC AAGAACACCTTCTCCCAGCTGTCCGAGCT	2266 (0.023502%)	
CCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAATAG AAGACAGGAAAAATGAGAGAAAAAATCAA	89 (0.000923%)	
CCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGA	3171 (0.013156%)	
CCACCTACCCCCAGACCAAGACCTACTTCCCCCACTTCGA	353 (0.001464%)	
CCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGG CCACTCGCAACCCCTCTCTGCTGACCCCA	8786 (0.091126%)	
CCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGA	1228 (0.005095%)	
CCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACT	2642 (0.010961%)	
CCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGT ACCGTGGTCAGAGCTGGACCCAACACACC	2195 (0.022766%)	
CCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCT CCCAGCTGTCCGAGCTGCACTGCGACAAG	666 (0.006908%)	
CCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGG	369 (0.001531%)	
CCACGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGT	9506 (0.039438%)	
CCACGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGT	10061 (0.041740%)	
CCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGC ACTGTGCTGACTGCCAAGTACCGTTAAGC	1897 (0.019675%)	
CCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGT	309 (0.001282%)	
CCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTG AAGCTGCCAACCACGTTGATGACATTGCT	118 (0.001224%)	
CCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCC	3847 (0.015960%)	
CCAGAGCCAAGTCCGGTGCCCGGAAATCGCCCAAGAAGAA	20503 (0.085061%)	
CCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTA AGCCGTGTACCGTGGTCAGAGCTGGACCC	1992 (0.020661%)	
CCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGA AGCAGCTCATCACCGGCCTCTGGGGCAAG	1231 (0.012768%)	
CCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCA	23973 (0.248643%)	

GCCAGGCTCTGTCTGAGCTCAGCAACCTG		
CCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGC	696 (0.007219%)	
CCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGT	1742 (0.018068%)	
CCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGC	766 (0.003178%)	
CCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGAC	219 (0.000909%)	
CCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCT	848 (0.008795%)	
CCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCAC	1636 (0.006787%)	
CCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTC	155 (0.001608%)	
CCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAA	353 (0.001464%)	
CCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAAC	132 (0.001369%)	
CCCAACACACCACCAGCCCTCCGACAGCGAGCAGTCAAAT	36 (0.000149%)	
CCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCT	2815 (0.011679%)	
CCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGC	304 (0.003153%)	
CCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAAATCA	575 (0.005964%)	
CCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGG	2041 (0.008468%)	
CCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAA	1599 (0.016584%)	
CCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGG	27177 (0.112749%)	
CCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTTGATGACATTGC	2412 (0.025017%)	
CCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGC	10310 (0.042773%)	
CCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGC	1437 (0.014904%)	
CCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACC	2571 (0.026666%)	
CCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAA	2221 (0.023036%)	
CCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGG	473 (0.004906%)	
CCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGA	1219 (0.005057%)	
CCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAG	1445 (0.014987%)	
CCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTG	227 (0.002354%)	
CCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGAC	180 (0.001867%)	
CCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCG	955 (0.009905%)	
CCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCT	32 (0.000332%)	
CCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCC	35 (0.000363%)	
CCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCA	171 (0.001774%)	
CCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTC	343 (0.001423%)	
CCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCA	1982 (0.020557%)	
CCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGA	3410 (0.035368%)	

CTGCCAAGTACCGTTAAGCCGTGTACCGT		
CCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGG	5743 (0.023826%)	
CCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCG	1380 (0.005725%)	
CCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAA	816 (0.008463%)	
CCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCG	679 (0.002817%)	
CCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGT	545 (0.005653%)	
CCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCG	505 (0.005238%)	
CCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTG	381 (0.003952%)	
CCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGAC	912 (0.003784%)	
CCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACACCACCAGCCC	569 (0.005902%)	
CCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTT	532 (0.005518%)	
CCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTG	563 (0.002336%)	
CCCTGTGGAGGATGTTCCACTCCTACCCCCCGACCAAGAC	234 (0.000971%)	
CCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCA	156 (0.001618%)	
CCGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCC	6751 (0.070020%)	
CCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGT	5309 (0.022026%)	
CCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGT	1905 (0.007903%)	
CCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAA	3964 (0.016445%)	
CCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTT	1300 (0.005393%)	
CCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGAC	612 (0.002539%)	
CCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAAT	1279 (0.013265%)	
CCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCAT	817 (0.008474%)	
CCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGC	1214 (0.005037%)	
CCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGC	1282 (0.013297%)	
CCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGC	2149 (0.008916%)	
CCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCC	569 (0.005902%)	
CCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTA	978 (0.010144%)	
CCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCT	33 (0.000137%)	
CCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTC	180 (0.001867%)	
CCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATA	188 (0.000780%)	
CCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCAC	323 (0.001340%)	
CCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCA	10510 (0.043603%)	
CCGGGCCCGACAGCTTCTAACCAAATAAAGCTCACCCTGT	32 (0.000133%)	
CCGTAATCATGCTAATCTTCATCATCTGAGAAGCCTTCGC	571 (0.002369%)	

CCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCAC GTGGACCCCGAGAACTTCAGGCTCCTGGG	9170 (0.095109%)	
CCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCC TGTGTACCATCAATAAAAAATACTCTTGC	127 (0.001317%)	
CCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGG CTCTGTCTGAGCTCAGCAACCTGCACGCC	803 (0.008329%)	
CCTACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCAC GGCAAGAAGGTGGCAGCTGCACTGGTTGA	820 (0.008505%)	
CCTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCAT GGCAAGAAAGTGGTGGCTGCCCTGGGCAA	181 (0.001877%)	
CCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCT GCACTGGTTGAAGCTGCCAACCACGTTGA	3501 (0.036312%)	
CCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCT GCCCTGGGCAATGCCATCAAGAACCTGGA	4751 (0.049276%)	
CCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAG	761 (0.003157%)	
CCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCA ACCACGTTGATGACATTGCTGGTGCCCTC	110 (0.001141%)	
CCTCACAGCCGTAATCATGCTAATCTTCATCATCTGAGAA	4646 (0.019275%)	
CCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTC ATCACCGGCCTCTGGGGCAAGGTCAACGT	982 (0.010185%)	
CCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTC AGTGCTTCCTGGTGGTGGTGGCCACTCGC	1925 (0.019966%)	
CCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACT GCCAAGTACCGTTAAGCCGTGTACCGTGG	1882 (0.019520%)	
CCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACT	1273 (0.005281%)	
CCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTC AGAGCTGGACCCAACACACCACCAGCCCT	807 (0.008370%)	
CCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCG AGAACTTCAGGCTCCTGGGTGACATCCTG	2186 (0.022673%)	
CCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGC	3917 (0.016250%)	
CCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGC	37896 (0.157220%)	
CCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGG TTGCCCACGCTCTGGCCCGCAAGTACCAC	2557 (0.026521%)	
CCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCT ACAACCTGCGTGTGGACCCCGTGAACTTC	648 (0.006721%)	
CCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGC TGGCTGAGAAGTACAGATGAGCTGTCAGC	431 (0.004470%)	
CCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTC	1614 (0.006696%)	
CCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTG CCTGGCAGAAGCTGGTGCGTGTGGTTGCC	740 (0.007675%)	
CCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTC	4974 (0.020636%)	
CCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCC TGTGTGCCGTGGGCACTGTGCTGACTGCC	627 (0.006503%)	
CCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGG	868 (0.003601%)	
CCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCT TCGGGGAGGCCGTCAAGAACCTGGACAGC	987 (0.010237%)	
CCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTG	1556 (0.006455%)	
CCTGTGGAGGATGTTCCACTCCTACCCCCCGACCAAGACC	336 (0.001394%)	
CCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGT	3339 (0.013853%)	
CCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAACTAACAAGCACGAACATCGAATGAATCCACGGCTGC CCTCCCCCATTCCACACATTCGAAGAACC	10236 (0.106165%)	
CCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCA	2920 (0.012114%)	
CGAAAAAAGAAATTAGAATATAGAAAAAAATAAAGAAGAA	21412 (0.088832%)	

CGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAA	4276 (0.044350%)	
CGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGC	872 (0.003618%)	
CGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTTGATGACATTGCTGGTGCC	183 (0.001898%)	
CGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCG	1721 (0.017850%)	
CGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTT	2742 (0.011376%)	
CGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTC	11290 (0.046839%)	
CGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAAC	828 (0.003435%)	
CGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTC	796 (0.003302%)	
CGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGACC	750 (0.003112%)	
CGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAATA	164 (0.001701%)	
CGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATC	483 (0.005010%)	
CGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTC	1438 (0.005966%)	
CGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGT	2053 (0.021293%)	
CGCAAGTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCG	2638 (0.010944%)	
CGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGCG	1079 (0.004476%)	
CGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCC	1048 (0.010870%)	
CGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAA	2325 (0.009646%)	
CGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCAC	355 (0.001473%)	
CGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAG	640 (0.006638%)	
CGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCT	2694 (0.011177%)	
CGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTG	518 (0.005373%)	
CGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCC	1159 (0.012021%)	
CGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATG	695 (0.002883%)	
CGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTAC	252 (0.002614%)	
CGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAG	54 (0.000224%)	
CGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTC	1501 (0.006227%)	
CGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCACCCT	347 (0.001440%)	
CGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCA	1552 (0.016097%)	
CGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAA	687 (0.002850%)	
CGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCACC	869 (0.003605%)	
CGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCG	1467 (0.006086%)	
CGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTG	1066 (0.004423%)	

CGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTG	6964 (0.028892%)	
CGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACC GTGGTCAGAGCTGGACCCAACACACCACC	5952 (0.061733%)	
CGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAGAAAAA	329 (0.001365%)	
CGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCC	3247 (0.013471%)	
CGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTC	2687 (0.011148%)	
CGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGG ACAGCATCAAGAACACCTTCTCCCAGCTG	5911 (0.061308%)	
CGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCC AGCTGTCCGAGCTGCACTGCGACAAGCTG	3711 (0.038490%)	
CGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAAC	7411 (0.030746%)	
CGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAG	2403 (0.009969%)	
CGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGG CCCGCAAGTACCACTAAGGAGCAACAGGA	1100 (0.011409%)	
CGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATC	482 (0.002000%)	
CGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAA	4094 (0.016985%)	
CGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTC AAGAACCTGGACAGCATCAAGAACACCTT	2876 (0.029829%)	
CGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAA	602 (0.002498%)	
CGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACC TGTCCAGCGCCACGGCCATCGTCGGCAAC	1317 (0.013660%)	
CGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGA ACCTGTCCAGCGCCACGGCCATCGTCGGC	330 (0.003423%)	
CGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCC	2687 (0.011148%)	
CGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCA CCTCCTTCGGGGAGGCCGTCAAGAACCTG	21680 (0.224860%)	
CGGGAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGG ACAGCCGAGGAGAAGCAGCTCATCACCGG	6010 (0.062334%)	
CGTAAACCTAACCTTCTTCCCCCAACACTTCCTAGGCCTA	28107 (0.116608%)	
CGTAATCATGCTAATCTTCATCATCTGAGAAGCCTTCGCA	509 (0.002112%)	
CGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACG TGGACCCCGAGAACTTCAGGCTCCTGGGT	2165 (0.022455%)	
CGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGT TCACCACCTACCCCCAGACCAAGACCTAC	2540 (0.026344%)	
CGTCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAA	391 (0.001622%)	
CGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTG TGGTTGCCCACGCTCTGGCCCGCAAGTAC	515 (0.005341%)	
CGTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGAC	1560 (0.006472%)	
CGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTG	1722 (0.007144%)	
CGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGC GTGTGGTTGCCCACGCTCTGGCCCGCAAG	635 (0.006586%)	
CGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCA ACCCCAAGGTGCAAGCCCACGGCAAGAAG	10650 (0.110459%)	
CGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGC TCTGTCTGAGCTCAGCAACCTGCACGCCT	1315 (0.013639%)	
CGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCT	1374 (0.005700%)	
CGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAG	2141 (0.008882%)	
CGTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGAC	2327 (0.009654%)	

CTAACCTTCTTCCCCCAACACTTCCTAGGCCTAGCCGGAA	1464 (0.006074%)	
CTAATCTTCATCATCTGAGAAGCCTTCGCATCAAAACGCA	3996 (0.016578%)	
CTACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACG GCAAGAAGGTGGCAGCTGCACTGGTTGAA	249 (0.002583%)	
CTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATG GCAAGAAAGTGGTGGCTGCCCTGGGCAAT	135 (0.001400%)	
CTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACC CCAAGGTGCAAGCCCACGGCAAGAAGGTG	691 (0.007167%)	
CTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCC AGCGTGCTGGCTGAGAAGTACAGATGAGC	745 (0.007727%)	
CTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTG CACTGGTTGAAGCTGCCAACCACGTTGAT	589 (0.006109%)	
CTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAA	223 (0.000925%)	
CTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGA	791 (0.003282%)	
CTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAA CCACGTTGATGACATTGCTGGTGCCCTCT	209 (0.002168%)	
CTAGGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGT CGCCCTAGCCATTTGCACCCTAGTCTTAT	223 (0.002313%)	
CTCACAGCCGTAATCATGCTAATCTTCATCATCTGAGAAG	393 (0.001630%)	
CTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGG CGGCCAGGCCGAGGAATATGGCGCCGACG	5426 (0.056277%)	
CTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAA GTTCCTGTCGCAGTGCTTGCAGGTGGTGC	9468 (0.098200%)	
CTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACT	3243 (0.013454%)	
CTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCT GGTGGTGGTGGCCACTCGCAACCCCTCTC	504 (0.005227%)	
CTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGT GCTTCCTGGTGGTGGTGGCCACTCGCAAC	3331 (0.034548%)	
CTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTG	995 (0.004128%)	
CTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGT	9090 (0.037712%)	
CTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCA TCACCGGCCTCTGGGGCAAGGTCAACGTG	3440 (0.035679%)	
CTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACT	1706 (0.007078%)	
CTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGC TGCCTGGCAGAAGCTGGTGCGTGTGGTTG	1073 (0.011129%)	
CTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACT GCGACAAGCTGCACGTGGACCCCGAGAAC	8005 (0.083026%)	
CTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTC	152762 (0.633765%)	
CTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACT GTGCTGACTGCCAAGTACCGTTAAGCCGT	7678 (0.079634%)	
CTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCA GTGCTTCCTGGTGGTGGTGGCCACTCGCA	788 (0.008173%)	
CTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTG CCAAGTACCGTTAAGCCGTGTACCGTGGT	1660 (0.017217%)	
CTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCC ATGCCTGTGTACCATCAATAAAAAATACT	2064 (0.021407%)	
CTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCT	2649 (0.010990%)	
CTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCC AAGTACCGTTAAGCCGTGTACCGTGGTCA	3515 (0.036457%)	
CTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGTC	599 (0.002485%)	
CTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTC	484 (0.002008%)	
CTCTTCCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGG GGCGCCGAGGAGGAAATCGGAGCCGAGGC	24983 (0.259118%)	
CTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTA	1426 (0.014790%)	

CCGTTAAGCCGTGTACCGTGGTCAGAGCT		
CTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCA	463 (0.001921%)	
CTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCA	1537 (0.006377%)	
CTGCACTGGTTGAAGCTGCCAACCACGTCGATGACATTGC	1520 (0.006306%)	
CTGCCAACCACGTCGATGACATTGCTGGTGCCCTCTCCAA	1864 (0.007733%)	
CTGCCAACCACGTTGATGACATTGCTGGTGCCCTCTCCAA	2293 (0.009513%)	
CTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCC	1118 (0.004638%)	
CTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCAC GCCTACAACCTGCGTGTGGACCCCGTGAA	2490 (0.025826%)	
CTGCCGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCA AAATCGGCGGCCAGGCCGAGGAATATGGC	3973 (0.041207%)	
CTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCAT GCCTGTGTACCATCAATAAAAAATACTCT	1930 (0.020018%)	
CTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCT	7097 (0.029443%)	
CTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGC	622 (0.002580%)	
CTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAA GTACCGTTAAGCCGTGTACCGTGGTCAGA	968 (0.010040%)	
CTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCA	1888 (0.007833%)	
CTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGC TTCCCTGGACAAGTTCCTGTGTGCCGTGG	1498 (0.015537%)	
CTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTG	104217 (0.432366%)	
CTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCA GAGCTGGACCCAACACACCACCAGCCCTC	374 (0.003879%)	
CTGGACCCAACACACCACCAGCCCTCCGACAGCGAGCAGT	55 (0.000228%)	
CTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCC	3326 (0.013799%)	
CTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGTCCG	2715 (0.011264%)	
CTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCG	2229 (0.009247%)	
CTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCC	3126 (0.012969%)	
CTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGC	1492 (0.006190%)	
CTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGT GGCCAGCGTGCTGGCTGAGAAGTACAGAT	1295 (0.013431%)	
CTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTA CAACCTGCGTGTGGACCCCGTGAACTTCA	1745 (0.018099%)	
CTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCT GGCTGAGAAGTACAGATGAGCTGTCAGCC	277 (0.002873%)	
CTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACC	774 (0.003211%)	
CTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTC CCTGGACAAGTTCCTGTGTGCCGTGGGCA	670 (0.006949%)	
CTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCG	847 (0.003514%)	
CTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGC CTGGCAGAAGCTGGTGCGTGTGGTTGCCC	727 (0.007540%)	
CTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCA	7107 (0.029485%)	
CTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCT GGTGCGTGTGGTTGCCCACGCTCTGGCCC	12965 (0.134470%)	
CTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTG CTGGGTCAGTGCTTCCTGGTGGTGGTGGC	1031 (0.010693%)	
CTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACC	3144 (0.013044%)	

CTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCA	1985 (0.020588%)	
CTGGTTGAAGCTGCCAACCACGTCGATGACATTGCTGGTG	641 (0.002659%)	
CTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGT	1752 (0.007269%)	
CTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGC	5981 (0.024813%)	
CTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCG	297 (0.001232%)	
CTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCA	649 (0.006731%)	
CTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGG	688 (0.002854%)	
CTGTGGAGGATGTTCCACTCCTACCCCCCGACCAAGACCT	914 (0.003792%)	
CTTAACTGTCTCTTACAGGCAATCGGTGAAATTGATCTCCCTGTGCAAAAGCAGGGATAATCCCATAAGACGAGAAGACCCTGTGGAACTTTAAAACCAG	420 (0.004356%)	
CTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCC	6248 (0.025921%)	
CTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGT	5584 (0.057916%)	
CTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTG	15767 (0.065413%)	
CTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCC	6864 (0.028477%)	
CTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGT	6075 (0.063009%)	
CTTCATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCA	691 (0.002867%)	
CTTCCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCC	8327 (0.086366%)	
CTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCT	3822 (0.015856%)	
CTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACACCACCAG	2954 (0.030638%)	
CTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACT	1414 (0.014666%)	
CTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCAC	35882 (0.148864%)	
CTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTTGATGACATTGCTGGT	1633 (0.016937%)	
CTTCGCATCAAAACGCAAAGCATCTCAGCCAGAACTAACAAGCACGAACATCGAATGAATCCACGGCTGCCCTCCCCCATTCCACACATTCGAAGAACCA	483 (0.005010%)	
CTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGG	6542 (0.027141%)	
CTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACA	10339 (0.107234%)	
CTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAAC	1223 (0.005074%)	
CTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTAC	1830 (0.007592%)	
GAAAAAAAAA	295723 (0.306717%)	
GAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAAGAT	1630 (0.006762%)	
GAAAAAAAGAAAATAGAAAATTATAGAAAAAAAGAAAAAC	12046 (0.049975%)	
GAAAAAAAGAAAATAGAAAATTGTAGAAAAAAAGAAAAAC	18321 (0.076009%)	
GAAAAAAGAAATTAGAATATAGAAAAAATAAAGAAGAAA	577 (0.002394%)	
GAAAAAATAGAAGACAGGAAAAATGAGAGAAAAATCAAAG	1902 (0.007891%)	
GAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGG	1740 (0.007219%)	

GAAAAACCCAAGTGCTGAAAATTTGAGAAGATGGAAGTGAAAGAAAACAGGGATTAAAGGAGAAGAGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAA	5610 (0.058186%)	
GAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGA	3315 (0.013753%)	
GAAAAATCCCGATTTGGGTCCCGGAGCCGGGAAAATTTCA	1289 (0.005348%)	
GAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAA	1143 (0.004742%)	
GAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAA	1605 (0.006659%)	
GAAAATAGAA	392836 (0.407441%)	
GAAAATAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGC	375 (0.001556%)	
GAAAATAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGC	15722 (0.065226%)	
GAAAATAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGC	683 (0.002834%)	
GAAAATAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAA	1029 (0.004269%)	
GAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAAT	1146 (0.004754%)	
GAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAAT	1640 (0.006804%)	
GAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAA	445 (0.001846%)	
GAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAAT	1305 (0.005414%)	
GAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGG	457 (0.001896%)	
GAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGT	2990 (0.012405%)	
GAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTG	911 (0.009449%)	
GAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAA	655 (0.002717%)	
GAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCT	563 (0.002336%)	
GAAATTAGAATATAGAAAAAAATAAAGAAGAAAATTGGAA	174 (0.000722%)	
GAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGGCTCCTGGGTGACATC	893 (0.009262%)	
GAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGAC	306 (0.003174%)	
GAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTG	1386 (0.005750%)	
GAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTG	881 (0.009138%)	
GAAGAAAAATCCCGATTTGGGTCCCGGAGCCGGGAAAATT	724 (0.003004%)	
GAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTA	327 (0.001357%)	
GAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAG	342 (0.001419%)	
GAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGA	4728 (0.019615%)	
GAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAG	329 (0.001365%)	
GAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTT	226 (0.000938%)	
GAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCA	15915 (0.066027%)	
GAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAAC	356 (0.001477%)	
GAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAGA	197 (0.000817%)	

GAAGCTGCCAACCACGTCGATGACATTGCTGGTGCCCTCT	179 (0.000743%)	
GAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAG	2612 (0.010836%)	
GAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTG	657 (0.006814%)	
GAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTC	1186 (0.004920%)	
GAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCC	2864 (0.011882%)	
GAATATAGAAAAAAATAAAGAAGAAAATTGGAAAATAGAA	153 (0.000635%)	
GACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCAGA	1704 (0.017674%)	
GACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCA	793 (0.003290%)	
GACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACACCACCAGCCCTCCGA	439 (0.004553%)	
GACAGGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAG	46 (0.000191%)	
GACAGGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGG	63 (0.000261%)	
GACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGA	906 (0.009397%)	
GACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGG	661 (0.002742%)	
GACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACG	2449 (0.010160%)	
GACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGG	120 (0.001245%)	
GACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAG	272 (0.002821%)	
GACCCAACACACCACCAGCCCTCCGACAGCGAGCAGTCAA	23 (0.000095%)	
GACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGG	99 (0.001027%)	
GACCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTCG	4001 (0.016599%)	
GACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACA	213 (0.002209%)	
GACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGG	2573 (0.010675%)	
GACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTG	1195 (0.012394%)	
GACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCA	1402 (0.005816%)	
GACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTTGATGACATTGCTGGTGCCC	65 (0.000674%)	
GACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGA	322 (0.003340%)	
GACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTG	414 (0.001718%)	
GACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGG	4861 (0.020167%)	
GAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAATCAA	374 (0.001552%)	
GAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGC	128 (0.000531%)	
GAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAGCG	201 (0.000834%)	
GAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCC	7088 (0.029406%)	
GAGAACTTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGG	37090 (0.384689%)	
GAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAAGAGAA	3032 (0.012579%)	

GAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGA	779 (0.003232%)	
GAGAGAAAAAATAGAAGACAGGAAAAATGAGAGAAAAATC	198 (0.000821%)	
GAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAA	136 (0.000564%)	
GAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAAG	137 (0.000568%)	
GAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACA GCCGAGGAGAAGCAGCTCATCACCGGCCT	1384 (0.014355%)	
GAGCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGA	96 (0.000398%)	
GAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAG GAGAAGCAGCTCATCACCGGCCTCTGGGG	61 (0.000633%)	
GAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCC	533 (0.002211%)	
GAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACT	1526 (0.006331%)	
GAGCTGGACCCAACACACCACCAGCCCTCCGACAGCGAGC	44 (0.000183%)	
GAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAG	130 (0.000539%)	
GAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACT	218 (0.000904%)	
GAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAGAAG	221 (0.000917%)	
GAGGAGCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAG	20924 (0.086808%)	
GAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGA	156 (0.000647%)	
GAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCC	208 (0.000863%)	
GAGGATGTTCCACTCCTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACC AGATCCGTGGCCATGGCAAGAAAGTGGTG	222 (0.002303%)	
GAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAA	1617 (0.006708%)	
GAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGACCA	194 (0.000805%)	
GAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCG	115 (0.000477%)	
GAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGG	823 (0.003414%)	
GAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGC CGTGTACCGTGGTCAGAGCTGGACCCAAC	617 (0.006399%)	
GAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGC CAGGCCGAGGAATATGGCGCCGACGCCCT	304 (0.003153%)	
GAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGC TGTCAGCCATGCCTGTGTACCATCAATAA	219 (0.002271%)	
GAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAA GTACAGATGAGCTGTCAGCCATGCCTGTG	486 (0.005041%)	
GAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTT	75 (0.000311%)	
GAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTT CGGGAACCTGTCCAGCGCCACGGCCATCG	75 (0.000778%)	
GAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGC AGCTCATCACCGGCCTCTGGGGCAAGGTC	1285 (0.013328%)	
GATCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCC AGGCTCTGTCTGAGCTCAGCAACCTGCAC	345 (0.003578%)	
GATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTG	304 (0.001261%)	
GATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCC	1568 (0.006505%)	
GATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAA	3206 (0.013301%)	
GCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCAC	1420 (0.005891%)	

GCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGAC AGCATCAAGAACACCTTCTCCCAGCTGTC	990 (0.010268%)	
GCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTG CTGACTGCCAAGTACCGTTAAGCCGTGTA	871 (0.009034%)	
GCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAG CTCAGCAACCTGCACGCCTACAACCTGCG	1026 (0.010641%)	
GCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAG CTGTCCGAGCTGCACTGCGACAAGCTGCA	1213 (0.012581%)	
GCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACCA	16229 (0.067329%)	
GCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGC CGAGGAGAAGCAGCTCATCACCGGCCTCT	1466 (0.015205%)	
GCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACA CCTTCTCCCAGCTGTCCGAGCTGCACTGC	452 (0.004688%)	
GCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAA	1942 (0.008057%)	
GCAAGTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCGC	680 (0.002821%)	
GCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCCGCGC	807 (0.003348%)	
GCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAAC CTGCGTGTGGACCCCGTGAACTTCAAGTT	350 (0.003630%)	
GCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCA GCCATGCCTGTGTACCATCAATAAAAAAT	344 (0.003568%)	
GCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGG	224 (0.000929%)	
GCACTGGTTGAAGCTGCCAACCACGTCGATGACATTGCTG	718 (0.002979%)	
GCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGC	5110 (0.021200%)	
GCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCAC CGGCCTCTGGGGCAAGGTCAACGTGGCCG	285 (0.002956%)	
GCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGATGACA	1399 (0.005804%)	
GCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTG	347 (0.001440%)	
GCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGC	1157 (0.004800%)	
GCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAG	839 (0.003481%)	
GCCAACCACGTCGATGACATTGCTGGTGCCCTCTCCAAGC	519 (0.002153%)	
GCCAACCACGTTGATGACATTGCTGGTGCCCTCTCCAAGC	511 (0.002120%)	
GCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAG GATGTTCACCACCTACCCCCAGACCAAGA	3945 (0.040917%)	
GCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAG	2300 (0.009542%)	
GCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACG	2287 (0.009488%)	
GCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGG CACTGTGCTGACTGCCAAGTACCGTTAAG	5847 (0.060644%)	
GCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTC CTGTCGCAGTGCTTGCAGGTGGTGCTGGC	1432 (0.014852%)	
GCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCA	2958 (0.012272%)	
GCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCG TGTGGACCCCGTGAACTTCAAGTTCCTGT	1174 (0.012176%)	
GCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGA	420 (0.001742%)	
GCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTG TCTGAGCTCAGCAACCTGCACGCCTACAA	990 (0.010268%)	
GCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACAG	3162 (0.013118%)	
GCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTT	222 (0.002303%)	

CTCCCAGCTGTCCGAGCTGCACTGCGACA		
GCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTG	2103 (0.008725%)	
GCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCA	2294 (0.023793%)	
GCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGC	932 (0.009666%)	
GCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATC	1928 (0.019997%)	
GCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGCC	430 (0.001784%)	
GCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTC	2846 (0.029518%)	
GCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACT	1115 (0.011565%)	
GCCCTGTGGAGGATGTTCCACTCCTACCCCCCGACCAAGA	1233 (0.005115%)	
GCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCC	389 (0.004035%)	
GCCGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGC	9012 (0.093470%)	
GCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGT	460 (0.001908%)	
GCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGA	1202 (0.004987%)	
GCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCA	1583 (0.016419%)	
GCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGG	2575 (0.010683%)	
GCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACC	548 (0.005684%)	
GCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGC	7178 (0.029779%)	
GCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAAT	413 (0.001713%)	
GCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCA	15933 (0.066101%)	
GCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCACCCTG	59 (0.000245%)	
GCCGTAATCATGCTAATCTTCATCATCTGAGAAGCCTTCG	988 (0.004099%)	
GCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAATAAAAAATACTCTTG	305 (0.003163%)	
GCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGG	5878 (0.024386%)	
GCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAG	840 (0.008712%)	
GCCTTCGCATCAAAACGCAAAGCATCTCAGCCAGAACTAA	219 (0.000909%)	
GCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCC	406 (0.004211%)	
GCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCA	557 (0.002311%)	
GCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGT	307 (0.003184%)	
GCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGAT	545 (0.002261%)	
GCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAATAAA	467 (0.001937%)	
GCGCCGGGCCCGACAGCTTCTAACCAAATAAAGCTCACCC	692 (0.002871%)	
GCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGAGAAAA	1022 (0.004240%)	
GCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAA	305 (0.003163%)	
GCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGG	894 (0.009272%)	

AACCTGTCCAGCGCCACGGCCATCGTCGG		
GCGTCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTA	634 (0.002630%)	
GCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGC	768 (0.003186%)	
GCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAA	4537 (0.018823%)	
GCTAATCTTCATCATCTGAGAAGCCTTCGCATCAAAACGC	673 (0.002792%)	
GCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGC CAGCGTGCTGGCTGAGAAGTACAGATGAG	486 (0.005041%)	
GCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCAC	964 (0.003999%)	
GCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCC TGGTGGTGGTGGCCACTCGCAACCCCTCT	1081 (0.011212%)	
GCTCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGA TCGTCTACCCCTGGACCCAGAGGTTCTTC	1215 (0.012602%)	
GCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCAC	1935 (0.008028%)	
GCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGG CTGCCTGGCAGAAGCTGGTGCGTGTGGTT	337 (0.003495%)	
GCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGC	1476 (0.006123%)	
GCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGT	929 (0.003854%)	
GCTCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGT	817 (0.003389%)	
GCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGT ACCGTTAAGCCGTGTACCGTGGTCAGAGC	2384 (0.024726%)	
GCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTC	2233 (0.009264%)	
GCTGCACTGGTTGAAGCTGCCAACCACGTCGATGACATTG	1365 (0.005663%)	
GCTGCCAACCACGTCGATGACATTGCTGGTGCCCTCTCCA	321 (0.001332%)	
GCTGCCAACCACGTTGATGACATTGCTGGTGCCCTCTCCA	374 (0.001552%)	
GCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCA CGCCTACAACCTGCGTGTGGACCCCGTGA	1199 (0.012436%)	
GCTGCCGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGC AAAATCGGCGGCCAGGCCGAGGAATATGG	20976 (0.217558%)	
GCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTC	12630 (0.052398%)	
GCTGGACCCAACACACCACCAGCCCTCCGACAGCGAGCAG	229 (0.000950%)	
GCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTG	4409 (0.018292%)	
GCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCG TGGCCAGCGTGCTGGCTGAGAAGTACAGA	3962 (0.041093%)	
GCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAAC	1597 (0.006625%)	
GCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTT CCCTGGACAAGTTCCTGTGTGCCGTGGGC	1417 (0.014697%)	
GCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACT GCTGGGTCAGTGCTTCCTGGTGGTGGTGG	518 (0.005373%)	
GCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTAC	2467 (0.010235%)	
GCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCC	676 (0.002805%)	
GCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATG GCGCCGACGCCCTGGAGAGGATGTTCACC	582 (0.006036%)	
GCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGC	2101 (0.008716%)	
GCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCG TGGTCAGAGCTGGACCCAACACACCACCA	1710 (0.017736%)	
GCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAG	4536 (0.047046%)	

TTCCTGTGTGCCGTGGGCACTGTGCTGAC		
GCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTA	854 (0.003543%)	
GGAAAAATGAGAGAAAAAATCAAAGAGGATTTAGAGGAGA	1863 (0.007729%)	
GGAAAAATGAGAGAAAAATCAAAGAGGATTTAGAGGAGAA	2583 (0.010716%)	
GGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGA	7193 (0.029842%)	
GGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGG	1899 (0.007878%)	
GGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGG	4902 (0.020337%)	
GGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAA	320 (0.001328%)	
GGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCC	4567 (0.018947%)	
GGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACC TCCTTCGGGGAGGCCGTCAAGAACCTGGA	1278 (0.013255%)	
GGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCA	1368 (0.005675%)	
GGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCC	1959 (0.008127%)	
GGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGA GCTGGACCCAACACACCACCAGCCCTCCG	1216 (0.012612%)	
GGACCCAACACACCACCAGCCCTCCGACAGCGAGCAGTCA	24 (0.000100%)	
GGACCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGTC	369 (0.001531%)	
GGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGT ACAGCCCCGAGGTGCACTCTGCCGTCGAC	94 (0.000975%)	
GGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTG	740 (0.003070%)	
GGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTG	5634 (0.023374%)	
GGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAGAAGGA	428 (0.001776%)	
GGAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGAC AGCCGAGGAGAAGCAGCTCATCACCGGCC	1396 (0.014479%)	
GGAGCCAATTTTGAGGGAAGAGGAGGAAAATTGAAGAGTG	354 (0.001469%)	
GGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCCCC	1381 (0.005729%)	
GGAGGAAAATTGAAGAGTGAAGATGAAGTCGGCAGGGAAA	152 (0.000631%)	
GGAGGAAATCGGAGCCGAGGCCCTGTGGAGGATGTTCCAC	483 (0.002004%)	
GGAGGATGTTCCACTCCTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGAC CAGATCCGTGGCCATGGCAAGAAAGTGGT	24792 (0.257137%)	
GGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGA AGTACAGATGAGCTGTCAGCCATGCCTGT	4481 (0.046476%)	
GGATTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAA	18908 (0.078444%)	
GGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCA	3951 (0.016392%)	
GGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGA CAGCATCAAGAACACCTTCTCCCAGCTGT	867 (0.008992%)	
GGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGA GCTCAGCAACCTGCACGCCTACAACCTGC	361 (0.003744%)	
GGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCA GCTGTCCGAGCTGCACTGCGACAAGCTGC	681 (0.007063%)	
GGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCCAACC	1828 (0.007584%)	
GGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGA	1056 (0.004381%)	
GGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAA		

CCTGCGTGTGGACCCCGTGAACTTCAAGT	661 (0.006856%)	
GGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCG	5063 (0.021005%)	
GGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGATGAC	3163 (0.013122%)	
GGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCT	323 (0.001340%)	
GGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGG GCACTGTGCTGACTGCCAAGTACCGTTAA	2645 (0.027433%)	
GGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAG	787 (0.003265%)	
GGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCA AGAACCTGGACAGCATCAAGAACACCTTC	535 (0.005549%)	
GGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCT GTCTGAGCTCAGCAACCTGCACGCCTACA	451 (0.004678%)	
GGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGTCCGGC	770 (0.003195%)	
GGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGGC	954 (0.003958%)	
GGCCCTGTGGAGGATGTTCCACTCCTACCCCCCGACCAAG	339 (0.001406%)	
GGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCA ACTTCGGGAACCTGTCCAGCGCCACGGCC	1585 (0.016439%)	
GGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAG	6989 (0.028995%)	
GGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACCAAA	416 (0.001726%)	
GGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCA CCTACCCCCAGACCAAGACCTACTTCCCC	1722 (0.017860%)	
GGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCT GTCCAGCGCCACGGCCATCGTCGGCAACC	360 (0.003734%)	
GGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGGA	502 (0.002083%)	
GGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAA CCTGTCCAGCGCCACGGCCATCGTCGGCA	1024 (0.010621%)	
GGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCAC	1301 (0.005397%)	
GGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGG CCAGCGTGCTGGCTGAGAAGTACAGATGA	1131 (0.011730%)	
GGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCA	3468 (0.014388%)	
GGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAG GCTGCCTGGCAGAAGCTGGTGCGTGTGGT	1215 (0.012602%)	
GGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAG	1367 (0.005671%)	
GGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAGTTCCTGT CGCAGTGCTTGCAGGTGGTGCTGGCTACC	277 (0.002873%)	
GGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGC ACGCCTACAACCTGCGTGTGGACCCCGTG	2477 (0.025691%)	
GGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCT	6760 (0.028045%)	
GGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCATCTGGGG	2455 (0.010185%)	
GGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCA	461 (0.001913%)	
GGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCTCAC CTCCTTCGGGGAGGCCGTCAAGAACCTGG	297 (0.003080%)	
GGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTCGGC	1989 (0.008252%)	
GGGAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGA CAGCCGAGGAGAAGCAGCTCATCACCGGC	2542 (0.026365%)	
GGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACA ACCTGCGTGTGGACCCCGTGAACTTCAAG	1070 (0.011098%)	
GGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAGG	308 (0.001278%)	

GGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCA	2190 (0.009086%)	
GGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGAG	1475 (0.006119%)	
GGGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGGA	586 (0.002431%)	
GGGGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTGG	359 (0.001489%)	
GGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCAT	151 (0.001566%)	
GGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCT	203 (0.000842%)	
GGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCC	465 (0.001929%)	
GGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACT	378 (0.003921%)	
GGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGC	2690 (0.011160%)	
GGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCAC	2308 (0.023938%)	
GGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATG	117 (0.001213%)	
GGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTT	281 (0.001166%)	
GGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTG	460 (0.001908%)	
GGTCAGAGCTGGACCCAACACACCACCAGCCCTCCGACAG	115 (0.000477%)	
GGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCT	929 (0.003854%)	
GGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTG	802 (0.008318%)	
GGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGC	1070 (0.004439%)	
GGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACAC	780 (0.008090%)	
GGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACT	1955 (0.008111%)	
GGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGC	1771 (0.018368%)	
GGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGG	1006 (0.010434%)	
GGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCA	453 (0.001879%)	
GGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACG	361 (0.003744%)	
GGTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCAC	1854 (0.019229%)	
GGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGCCTGTGTACCATCAATAAAA	570 (0.005912%)	
GGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCA	307 (0.003184%)	
GGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCAC	1365 (0.005663%)	
GGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAG	465 (0.001929%)	
GGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTC	390 (0.004045%)	
GGTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGAT	857 (0.003555%)	
GGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGT	3479 (0.036083%)	
GGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCC	2727 (0.028284%)	
GGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCC	502 (0.002083%)	
GGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTG		

CCGTGGGCACTGTGCTGACTGCCAAGTAC	310 (0.003215%)	
GGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAG	145 (0.001504%)	
GGTTCACTCATCTCCCTCACAGCCGTAATCATGCTAATCT	388 (0.001610%)	
GGTTGAAGCTGCCAACCACGTCGATGACATTGCTGGTGCC	553 (0.002294%)	
GGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCA	1705 (0.007074%)	
GGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCGCCCTAGCCATTTGCACCCTAGTCTTATACC	284 (0.002946%)	
GTAAACCTAACCTTCTTCCCCCAACACTTCCTAGGCCTAG	392 (0.001626%)	
GTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATGC	355 (0.003682%)	
GTAATCATGCTAATCTTCATCATCTGAGAAGCCTTCGCAT	107 (0.000444%)	
GTACCACTAAGGAGCAACAGGAGCGTCCGGCCGCGCCGCC	547 (0.002269%)	
GTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAA	199 (0.000826%)	
GTAGGTTCACTCATCTCCCTCACAGCCGTAATCATGCTAA	326 (0.001352%)	
GTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGG	14883 (0.061745%)	
GTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCC	34480 (0.357619%)	
GTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAGGCTCCTGGGTG	1100 (0.011409%)	
GTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACCTACCCCCAGACCAAGACCTACT	2040 (0.021158%)	
GTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTG	948 (0.003933%)	
GTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGC	2466 (0.010231%)	
GTCAGAGCTGGACCCAACACACCACCAGCCCTCCGACAGC	111 (0.000461%)	
GTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTC	3507 (0.014550%)	
GTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGT	3233 (0.033532%)	
GTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCA	2922 (0.012123%)	
GTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAGAGCTGGACCCAACACA	2528 (0.026220%)	
GTCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAA	3121 (0.012948%)	
GTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAG	1415 (0.005870%)	
GTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTCACCACC	423 (0.004387%)	
GTCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAAC	839 (0.003481%)	
GTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGGGTTGCCCACGCTCTGGCCCGCAAGTACC	3462 (0.035907%)	
GTCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACC	3015 (0.012508%)	
GTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGT	1772 (0.007352%)	
GTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGC	2160 (0.008961%)	
GTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCA	394 (0.001635%)	
GTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGT	1419 (0.014718%)	
GTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGT	1861 (0.019302%)	

GCGTGTGGTTGCCCACGCTCTGGCCCGCA		
GTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAA CCCCAAGGTGCAAGCCCACGGCAAGAAGG	2188 (0.022693%)	
GTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCG	556 (0.002307%)	
GTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAG GCCGAGGAATATGGCGCCGACGCCCTGGA	2163 (0.022434%)	
GTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAA	3350 (0.013898%)	
GTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGG CAGAAGCTGGTGCGTGTGGTTGCCCACGC	3046 (0.031592%)	
GTGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAA CACCTTCTCCCAGCTGTCCGAGCTGCACT	1065 (0.011046%)	
GTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGT CAGCCATGCCTGTGTACCATCAATAAAAA	1251 (0.012975%)	
GTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTG GGTCAGTGCTTCCTGGTGGTGGTGGCCAC	263 (0.002728%)	
GTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCG GGAACCTGTCCAGCGCCACGGCCATCGTC	213 (0.002209%)	
GTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACT	2402 (0.009965%)	
GTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGG	2139 (0.008874%)	
GTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGC CGTGGCCAGCGTGCTGGCTGAGAAGTACA	37677 (0.390777%)	
GTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATA TGGCGCCGACGCCCTGGAGAGGATGTTCA	2163 (0.022434%)	
GTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACA AGTTCCTGTGTGCCGTGGGCACTGTGCTG	5661 (0.058715%)	
GTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAG	2165 (0.008982%)	
GTGGACCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGG	64391 (0.267140%)	
GTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGA GTACAGCCCCGAGGTGCACTCTGCCGTCG	735 (0.007623%)	
GTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCC	1504 (0.006240%)	
GTGGAGGATGTTCCACTCCTACCCCCCGACCAAGACCTAC	354 (0.001469%)	
GTGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGATG	593 (0.002460%)	
GTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGT GGGCACTGTGCTGACTGCCAAGTACCGTT	3309 (0.034320%)	
GTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCT CTGTCTGAGCTCAGCAACCTGCACGCCTA	542 (0.005622%)	
GTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCT GCACGCCTACAACCTGCGTGTGGACCCCG	1222 (0.012674%)	
GTGGTCAGAGCTGGACCCAACACACCACCAGCCCTCCGAC	71595 (0.297027%)	
GTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCG	685 (0.002842%)	
GTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGC CGTGGGCACTGTGCTGACTGCCAAGTACC	775 (0.008038%)	
GTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAA CCTGCACGCCTACAACCTGCGTGTGGACC	877 (0.009096%)	
GTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTG TGCCGTGGGCACTGTGCTGACTGCCAAGT	950 (0.009853%)	
GTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAG	1725 (0.007157%)	
GTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTT	1092 (0.004530%)	
GTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGG	15094 (0.062621%)	
GTTCACCACCTACCCCCAGACCAAGACCTACTTCCCCCAC	1770 (0.007343%)	
GTTCACTCATCTCCCTCACAGCCGTAATCATGCTAATCTT	543 (0.002253%)	

GTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAG CTCATCACCGGCCTCTGGGGCAAGGTCAA	3931 (0.040771%)	
GTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGC	2796 (0.011600%)	
GTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTAC	3685 (0.015288%)	
GTTGAAGCTGCCAACCACGTCGATGACATTGCTGGTGCCC	1922 (0.007974%)	
GTTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACC	3418 (0.014180%)	
GTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAA	5273 (0.021876%)	
GTTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCGCC CTAGCCATTTGCACCCTAGTCTTATACCT	974 (0.010102%)	
GTTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAGGA	1763 (0.007314%)	
GTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	26 (0.000108%)	
TAAACCTAACCTTCTTCCCCCAACACTTCCTAGGCCTAGC	75 (0.000311%)	
TAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTG AGAAGTACAGATGAGCTGTCAGCCATGCC	111 (0.001151%)	
TAATCATGCTAATCTTCATCATCTGAGAAGCCTTCGCATC	66 (0.000274%)	
TAATCTTCATCATCTGAGAAGCCTTCGCATCAAAACGCAA	109 (0.000452%)	
TACAATTGGGAAAAATGAAAATAGAAAAAAAGAAAATAGA	28665 (0.118923%)	
TACCCCCAGACCAAGACCTACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGG CAAGAAGGTGGCAGCTGCACTGGTTGAAG	65 (0.000674%)	
TACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCATGG CAAGAAAGTGGTGGCTGCCCTGGGCAATG	66 (0.000685%)	
TACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCC CAAGGTGCAAGCCCACGGCAAGAAGGTGC	229 (0.002375%)	
TACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCA GCGTGCTGGCTGAGAAGTACAGATGAGCT	140 (0.001452%)	
TACTTCCCCCACTTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGC ACTGGTTGAAGCTGCCAACCACGTTGATG	147 (0.001525%)	
TAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGAAG	102 (0.000423%)	
TAGAAAATTATAGAAAAAAAGAAAAACCCAAGTGCTGAAA	33 (0.000137%)	
TAGAAAATTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAA	22 (0.000091%)	
TAGAAAATTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAA	49 (0.000203%)	
TAGAAGACAGGAAAAATGAGAGAAAAAATCAAAGAGGATT	181 (0.000751%)	
TAGAAGACAGGAAAAATGAGAGAAAAATCAAAGAGGATTT	231 (0.000958%)	
TAGAAGCGGAAAATAATGAAAAAAAAGAAGGATAAAGGGA	682 (0.002829%)	
TAGAATATAGAAAAAAATAAAGAAGAAAATTGGAAAATAG	128 (0.000531%)	
TAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAGA	219 (0.000909%)	
TAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAA	739 (0.003066%)	
TAGGTTCACTCATCTCCCTCACAGCCGTAATCATGCTAAT	47 (0.000195%)	
TAGGTTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTC GCCCTAGCCATTTGCACCCTAGTCTTATA	243 (0.002520%)	
TATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGA	144 (0.000597%)	
TCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCAC	684 (0.002838%)	

TCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTC CACGCTTCCCTGGACAAGTTCCTGTGTGC	551 (0.005715%)	
TCAAAGAGGATTTAGAGGAGAAAATAGAAGCGGAAAATAA	155 (0.000643%)	
TCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGT	575 (0.002386%)	
TCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCA GAGGTCCACGCTTCCCTGGACAAGTTCCT	465 (0.004823%)	
TCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTG GACCCCGTGAACTTCAAGTTCCTGTCGCA	570 (0.005912%)	
TCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTG GACCCCGAGAACTTCAGGCTCCTGGGTGA	377 (0.003910%)	
TCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGCCGACGCCCTGGAGAGGATGTTC ACCACCTACCCCCAGACCAAGACCTACTT	127 (0.001317%)	
TCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGA	232 (0.000963%)	
TCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTAC	94628 (0.392584%)	
TCACAGCCGTAATCATGCTAATCTTCATCATCTGAGAAGC	84 (0.000348%)	
TCACCACCTACCCCCAGACCAAGACCTACTTCCCCCACTT	1441 (0.005978%)	
TCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTC TACCCCTGGACCCAGAGGTTCTTCGCCAA	97 (0.001006%)	
TCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCTGCC	108 (0.000448%)	
TCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCG	1344 (0.005576%)	
TCAGAGCTGGACCCAACACACCACCAGCCCTCCGACAGCG	54 (0.000224%)	
TCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGC GGCCAGGCCGAGGAATATGGCGCCGACGC	965 (0.010009%)	
TCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGCGTGTGGACCCCGTGAACTTCAAG TTCCTGTCGCAGTGCTTGCAGGTGGTGCT	82 (0.000850%)	
TCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGC	2545 (0.010558%)	
TCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGC CAGGCTGCCTGGCAGAAGCTGGTGCGTGT	1696 (0.017591%)	
TCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTG	216 (0.000896%)	
TCAGTAGGTTCACTCATCTCCCTCACAGCCGTAATCATGC	22545 (0.093533%)	
TCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTG GTGGTGGTGGCCACTCGCAACCCCTCTCT	68 (0.000705%)	
TCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCT	336 (0.001394%)	
TCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGG ACAAGTTCCTGTGTGCCGTGGGCACTGTG	242 (0.002510%)	
TCATCACCGGCCTCTGGGGCAAGGTCAACGTGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATC GTCTACCCCTGGACCCAGAGGTTCTTCGC	1560 (0.016180%)	
TCATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATC	133 (0.000552%)	
TCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCA	135 (0.000560%)	
TCATGCTAATCTTCATCATCTGAGAAGCCTTCGCATCAAA	80 (0.000332%)	
TCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAG GAATATGGCGCCGACGCCCTGGAGAGGAT	848 (0.008795%)	
TCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTG CTTCCTGGTGGTGGTGGCCACTCGCAACC	789 (0.008183%)	
TCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCAC	880 (0.003651%)	
TCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTG TACCGTGGTCAGAGCTGGACCCAACACAC	691 (0.007167%)	
TCCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGGGCG	335 (0.003475%)	

CCGAGGAGGAAATCGGAGCCGAGGCCCTG		
TCCAGCGCCACGGCCATCGTCGGCAACCCCAAGGTGCAAG	3123 (0.012956%)	
TCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGG	154 (0.000639%)	
TCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTG	7156 (0.029688%)	
TCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGA	210 (0.000871%)	
TCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGG TCAGAGCTGGACCCAACACACCACCAGCC	77 (0.000799%)	
TCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGA	107 (0.000444%)	
TCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCAT CACCGGCCTCTGGGGCAAGGTCAACGTGG	446 (0.004626%)	
TCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGCGC CGACGCCCTGGAGAGGATGTTCACCACCT	61 (0.000633%)	
TCCGGCCGCGCCGCCGCGCCGGGCCCGACAGCTTCTAACC	876 (0.003634%)	
TCCGTGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAG GCTCTGTCTGAGCTCAGCAACCTGCACGC	650 (0.006742%)	
TCCTACCCCCCGACCAAGACCTACTTCCCCCACTTCGACCTGTCACAAGGCTCTGACCAGATCCGTGGCCA TGGCAAGAAAGTGGTGGCTGCCCTGGGCA	9104 (0.094425%)	
TCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCT CATCACCGGCCTCTGGGGCAAGGTCAACG	388 (0.004024%)	
TCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTT	604 (0.002506%)	
TCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCT GCCTGGCAGAAGCTGGTGCGTGTGGTTGC	379 (0.003931%)	
TCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTT	1297 (0.005381%)	
TCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTC CTGTGTGCCGTGGGCACTGTGCTGACTGC	793 (0.008225%)	
TCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCT	665 (0.002759%)	
TCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCG	391 (0.001622%)	
TCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTG CGACAAGCTGCACGTGGACCCCGAGAACT	24 (0.000249%)	
TCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGG	1703 (0.007065%)	
TCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGCT GCCAACCACGTTGATGACATTGCTGGTGC	49 (0.000508%)	
TCGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCT	1177 (0.004883%)	
TCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTG TGCTGACTGCCAAGTACCGTTAAGCCGTG	1447 (0.015008%)	
TCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTA	291 (0.001207%)	
TCGGAGCCGAGGCCCTGTGGAGGATGTTCCACTCCTACCC	1409 (0.005846%)	
TCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGTGCT	357 (0.001481%)	
TCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCA	1823 (0.007563%)	
TCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGCCCCAT	521 (0.002161%)	
TCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACCC	559 (0.002319%)	
TCGGGAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTG GACAGCCGAGGAGAAGCAGCTCATCACCG	3256 (0.033770%)	
TCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGCGT GTGGTTGCCCACGCTCTGGCCCGCAAGTA	136 (0.001411%)	
TCGTCGGCAACCCCAAGGTGCAAGCCCACGGCAAGAAGGT	283 (0.001174%)	

TCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTG CGTGTGGTTGCCCACGCTCTGGCCCGCAA	379 (0.003931%)	
TCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAAC CCCAAGGTGCAAGCCCACGGCAAGAAGGT	607 (0.006296%)	
TCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGA	258 (0.001070%)	
TCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAG TGCTTCCTGGTGGTGGTGGCCACTCGCAA	197 (0.002043%)	
TCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGT	4532 (0.018802%)	
TCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGC CAAGTACCGTTAAGCCGTGTACCGTGGTC	898 (0.009314%)	
TCTGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCC	119 (0.000494%)	
TCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCA TGCCTGTGTACCATCAATAAAAAATACTC	369 (0.003827%)	
TCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTG	353 (0.001464%)	
TCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCA AGTACCGTTAAGCCGTGTACCGTGGTCAG	250 (0.002593%)	
TCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGTCC	702 (0.002912%)	
TCTGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCC	597 (0.002477%)	
TCTTAACTGTCTCTTACAGGCAATCGGTGAAATTGATCTCCCTGTGCAAAAGCAGGGATAATCCCATAAGA CGAGAAGACCCTGTGGAACTTTAAAACCA	8591 (0.089104%)	
TCTTCATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGC	588 (0.002439%)	
TCTTCCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGG GCGCCGAGGAGGAAATCGGAGCCGAGGCC	204 (0.002116%)	
TGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTT	749 (0.003107%)	
TGAAGATGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGC	429 (0.001780%)	
TGAAGCTGCCAACCACGTCGATGACATTGCTGGTGCCCTC	193 (0.000801%)	
TGAAGTCGGCAGGGAAAGGAAAGTTTTTCTTCGCATTGGC	2248 (0.009326%)	
TGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGG CCGAGGAATATGGCGCCGACGCCCTGGAG	477 (0.004947%)	
TGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAG	448 (0.001859%)	
TGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGC AGAAGCTGGTGCGTGTGGTTGCCCACGCT	343 (0.003558%)	
TGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACT TCAAACTGCTGGGTCAGTGCTTCCTGGTG	38822 (0.402653%)	
TGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTAC CGTTAAGCCGTGTACCGTGGTCAGAGCTG	826 (0.008567%)	
TGAGAAGCCTTCGCATCAAAACGCAAAGCATCTCAGCCAG	855 (0.003547%)	
TGAGAGAAAAAATCAAAGAGGATTTAGAGGAGAAAATAGA	76 (0.000315%)	
TGAGAGAAAAATCAAAGAGGATTTAGAGGAGAAAATAGAA	66 (0.000274%)	
TGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGTC	318 (0.001319%)	
TGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCTC	1349 (0.005597%)	
TGCAAGCCCACGGCAAGAAGGTGCTCACCTCCTTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAAC ACCTTCTCCCAGCTGTCCGAGCTGCACTG	1295 (0.013431%)	
TGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTC AGCCATGCCTGTGTACCATCAATAAAAAA	179 (0.001857%)	
TGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCAG	586 (0.002431%)	
TGCACTGGTTGAAGCTGCCAACCACGTCGATGACATTGCT	845 (0.003506%)	

TGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAG	1638 (0.006796%)	
TGCCAACCACGTCGATGACATTGCTGGTGCCCTCTCCAAG	578 (0.002398%)	
TGCCAACCACGTTGATGACATTGCTGGTGCCCTCTCCAAG	893 (0.003705%)	
TGCCAGGCTGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCC	1832 (0.007600%)	
TGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTACAACCTGC GTGTGGACCCCGTGAACTTCAAGTTCCTG	353 (0.003661%)	
TGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAACA	3277 (0.013595%)	
TGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGG GTCAGTGCTTCCTGGTGGTGGTGGCCACT	110 (0.001141%)	
TGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACG CCTACAACCTGCGTGTGGACCCCGTGAAC	83 (0.000861%)	
TGCCGACTCAGAGGTGACATCATGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAA AATCGGCGGCCAGGCCGAGGAATATGGCG	5167 (0.053591%)	
TGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTGGCTGAGAAGTACAGATGAGCTGTCAGCCATG CCTGTGTACCATCAATAAAAAATACTCTT	77 (0.000799%)	
TGCCTGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTG	3214 (0.013334%)	
TGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCCAACTTCGG GAACCTGTCCAGCGCCACGGCCATCGTCG	217 (0.002251%)	
TGCGTGTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGT AAGGAGTACAGCCCCGAGGTGCACTCTGC	20686 (0.214551%)	
TGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTG	115310 (0.478388%)	
TGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTA	5395 (0.022382%)	
TGCTAATCTTCATCATCTGAGAAGCCTTCGCATCAAAACG	1365 (0.005663%)	
TGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCA	395 (0.001639%)	
TGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAG TACCGTTAAGCCGTGTACCGTGGTCAGAG	1551 (0.016087%)	
TGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGT	730 (0.003029%)	
TGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCC GTGGCCAGCGTGCTGGCTGAGAAGTACAG	624 (0.006472%)	
TGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAA	2020 (0.008380%)	
TGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCT TCCCTGGACAAGTTCCTGTGTGCCGTGGG	1758 (0.018234%)	
TGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAA	2939 (0.012193%)	
TGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAAC TGCTGGGTCAGTGCTTCCTGGTGGTGGTG	1733 (0.017974%)	
TGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATAT GGCGCCGACGCCCTGGAGAGGATGTTCAC	433 (0.004491%)	
TGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAA GTTCCTGTGTGCCGTGGGCACTGTGCTGA	3962 (0.041093%)	
TGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGT	1218 (0.005053%)	
TGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGC	756 (0.003136%)	
TGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTGGTCAG AGCTGGACCCAACACACCACCAGCCCTCC	427 (0.004429%)	
TGGACCCAACACACCACCAGCCCTCCGACAGCGAGCAGTC	25 (0.000104%)	
TGGACCCCGAGAACTTCAGGCTCCTGGGTGACATCCTGGT	1663 (0.006899%)	
TGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAG TACAGCCCCGAGGTGCACTCTGCCGTCGA	208 (0.002157%)	
TGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCT	330 (0.001369%)	

TGGAGGATGTTCCACTCCTACCCCCCGACCAAGACCTACT	178 (0.000738%)	
TGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTG AGCTCAGCAACCTGCACGCCTACAACCTG	1519 (0.015755%)	
TGGCAGAAGCTGGTGCGTGTGGTTGCCCACGCTCTGGCCC	9929 (0.041193%)	
TGGCAGCTGCACTGGTTGAAGCTGCCAACCACGTCGATGA	161 (0.000668%)	
TGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCCGTG GGCACTGTGCTGACTGCCAAGTACCGTTA	1675 (0.017373%)	
TGGCCATGGCAAGAAAGTGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTC TGTCTGAGCTCAGCAACCTGCACGCCTAC	86 (0.000892%)	
TGGCCCGCAAGTACCACTAAGGAGCAACAGGAGCGTCCGG	1398 (0.005800%)	
TGGCCCGCAAGTACCACTAAGGAGCAACAGGAGTGTCCGG	1157 (0.004800%)	
TGGCCGAGTGCGGCGGCGAGGCCCTGGCCAGGCTGCTGATCGTCTACCCCTGGACCCAGAGGTTCTTCGCC AACTTCGGGAACCTGTCCAGCGCCACGGC	20853 (0.216283%)	
TGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCA	11908 (0.049403%)	
TGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCA	2017 (0.008368%)	
TGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTG GCCAGCGTGCTGGCTGAGAAGTACAGATG	1748 (0.018130%)	
TGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTG CACGCCTACAACCTGCGTGTGGACCCCGT	853 (0.008847%)	
TGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAACCTGCACGCCTAC AACCTGCGTGTGGACCCCGTGAACTTCAA	360 (0.003734%)	
TGGGGGGCGCCGAGGAGGAAATCGGAGCCGAGGCCCTGTG	83898 (0.348068%)	
TGGGTAAGGAGTACAGCCCCGAGGTGCACTCTGCCGTCGACAAGTTCATGTCGGCCGTGGCCAGCGTGCTG GCTGAGAAGTACAGATGAGCTGTCAGCCA	177 (0.001836%)	
TGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCC	291 (0.001207%)	
TGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCC CTGGACAAGTTCCTGTGTGCCGTGGGCAC	213 (0.002209%)	
TGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGG	409 (0.001697%)	
TGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCC TGGCAGAAGCTGGTGCGTGTGGTTGCCCA	314 (0.003257%)	
TGGTCAGAGCTGGACCCAACACACCACCAGCCCTCCGACA	48 (0.000199%)	
TGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCAC	2764 (0.011467%)	
TGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTG GTGCGTGTGGTTGCCCACGCTCTGGCCCG	2540 (0.026344%)	
TGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGC TGGGTCAGTGCTTCCTGGTGGTGGTGGCC	374 (0.003879%)	
TGGTGCGTGTGGTTGCCCACGCTCTGGCCCGCAAGTACCA	2629 (0.010907%)	
TGGTGCTGGCTACCCGCCTGGGTAAGGAGTACAGCCCCGA	219 (0.000909%)	
TGGTGCTGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAA TATGGCGCCGACGCCCTGGAGAGGATGTT	2076 (0.021532%)	
TGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGTGCC GTGGGCACTGTGCTGACTGCCAAGTACCG	105 (0.001089%)	
TGGTGGCTGCCCTGGGCAATGCCATCAAGAACCTGGACAACCTCAGCCAGGCTCTGTCTGAGCTCAGCAAC CTGCACGCCTACAACCTGCGTGTGGACCC	110 (0.001141%)	
TGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTGTGT GCCGTGGGCACTGTGCTGACTGCCAAGTA	256 (0.002655%)	
TGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTTCCTG TGTGCCGTGGGCACTGTGCTGACTGCCAA	739 (0.007665%)	
TGGTTGAAGCTGCCAACCACGTCGATGACATTGCTGGTGC	232 (0.000963%)	
TGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGC	1358 (0.005634%)	

TGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAGA	213 (0.000884%)	
TGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTG	3555 (0.014749%)	
TGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGA	209 (0.000867%)	
TGTCCGCCGCCGACAAGGCCAACGTCAAGGCCGCTTTCAGCAAAATCGGCGGCCAGGCCGAGGAATATGGC GCCGACGCCCTGGAGAGGATGTTCACCAC	158 (0.001639%)	
TGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGG	894 (0.003709%)	
TGTGGACCCCGTGAACTTCAAGTTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGG AGTACAGCCCCGAGGTGCACTCTGCCGTC	1990 (0.020640%)	
TGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTC	2118 (0.008787%)	
TGTGGAGGATGTTCCACTCCTACCCCCCGACCAAGACCTA	543 (0.002253%)	
TGTGGTTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGA	2197 (0.009115%)	
TGTTCACCACCTACCCCCAGACCAAGACCTACTTCCCCCA	1160 (0.004813%)	
TTAACTGTCTCTTACAGGCAATCGGTGAAATTGATCTCCCTGTGCAAAAGCAGGGATAATCCCATAAGACG AGAAGACCCTGTGGAACTTTAAAACCAGC	50 (0.000519%)	
TTAGAATATAGAAAAAAATAAAGAAGAAAATTGGAAAATA	671 (0.002784%)	
TTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAAG	234 (0.000971%)	
TTATAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAG	157 (0.000651%)	
TTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCA	1460 (0.006057%)	
TTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGT CCACGCTTCCCTGGACAAGTTCCTGTGTG	1260 (0.013068%)	
TTCACCACCTACCCCCAGACCAAGACCTACTTCCCCCACT	558 (0.002315%)	
TTCACTCATCTCCCTCACAGCCGTAATCATGCTAATCTTC	77 (0.000319%)	
TTCACTCCCGACTGCCAGGCTGCCTGGCAGAAGCTGGTGC	1502 (0.006231%)	
TTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCG	5134 (0.021299%)	
TTCAGGCTCCTGGGTGACATCCTGGTCGTCGTCCTGGCCGCCCACTTCGGCAAGGACTTCACTCCCGACTG CCAGGCTGCCTGGCAGAAGCTGGTGCGTG	1523 (0.015796%)	
TTCATCATCTGAGAAGCCTTCGCATCAAAACGCAAAGCAT	159 (0.000660%)	
TTCCAGCCGCCACCATGCTGACCGCCGAGGACAAGAAGCTGATCCAGCAGACCTGGGGAAAGTTGGGGGGC GCCGAGGAGGAAATCGGAGCCGAGGCCCT	909 (0.009428%)	
TTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTG	251 (0.001041%)	
TTCCCTGGACAAGTTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACCGTTAAGCCGTGTACCGTG GTCAGAGCTGGACCCAACACACCACCAGC	101 (0.001048%)	
TTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGC TCATCACCGGCCTCTGGGGCAAGGTCAAC	844 (0.008754%)	
TTCCTGGTGGTGGTGGCCACTCGCAACCCCTCTCTGCTGACCCCAGAGGTCCACGCTTCCCTGGACAAGTT CCTGTGTGCCGTGGGCACTGTGCTGACTG	1133 (0.011751%)	
TTCCTGTCGCAGTGCTTGCAGGTGGTGCTGGCTACCCGCC	672 (0.002788%)	
TTCCTGTGTGCCGTGGGCACTGTGCTGACTGCCAAGTACC	3034 (0.012587%)	
TTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACG	1232 (0.005111%)	
TTCGACCTAGGAAAGGGCTCTGCTCAGGTCAAGGGTCACGGCAAGAAGGTGGCAGCTGCACTGGTTGAAGC TGCCAACCACGTTGATGACATTGCTGGTG	118 (0.001224%)	
TTCGGCAAGGACTTCACTCCCGACTGCCAGGCTGCCTGGC	3296 (0.013674%)	
TTCGGGAACCTGTCCAGCGCCACGGCCATCGTCGGCAACC	309 (0.001282%)	

TTCGGGAGCAAGAGCCCAGAGTTCCTCCGCAGCGCCCCAGCAGCCCAGCAAAGCCAGCACCATGGTGCAGTGGACAGCCGAGGAGAAGCAGCTCATCACC	19092 (0.198018%)	
TTCGGGGAGGCCGTCAAGAACCTGGACAGCATCAAGAACACCTTCTCCCAGCTGTCCGAGCTGCACTGCGACAAGCTGCACGTGGACCCCGAGAACTTCA	909 (0.009428%)	
TTCTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAG	436 (0.001809%)	
TTGAAGAGTGAAGATGAAGTCGGCAGGGAAAGGAAAGTTT	60 (0.000249%)	
TTGAAGCTGCCAACCACGTCGATGACATTGCTGGTGCCCT	116 (0.000481%)	
TTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAGT	101 (0.000419%)	
TTGATGACATTGCTGGTGCCCTCTCCAAGCTCAGTGACCT	1384 (0.005742%)	
TTGCAGGTGGTGCTGGCTACCCGCCTGGGTAAGGAGTACA	617 (0.002560%)	
TTGCCCACGCTCTGGCCCGCAAGTACCACTAAGGAGCAAC	3296 (0.013674%)	
TTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCA	2887 (0.011977%)	
TTGCTGGTGCCCTCTCCAAGCTCAGTGACCTCCACGCCCAAAAACTGCGTGTGGACCCTGTCAACTTCAAACTGCTGGGTCAGTGCTTCCTGGTGGTGGT	359 (0.003723%)	
TTGTAGAAAAAAAGAAAAACCCAAGTGCTGAAAATTTGAG	283 (0.001174%)	
TTTAGAGGAGAAAATAGAAGCGGAAAATAATGAAAAAAAA	1249 (0.005182%)	
TTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCGCCCTAGCCATTTGCACCCTAGTCTTATACCTCC	284 (0.002946%)	
TTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAGGACTT	107 (0.000444%)	
TTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAAG	193 (0.000801%)	
TTTTCAAGACGCATCCTCCCCTATCATAGAGGAACTTACACAGTTCCACGACCATGCTCTAATGGTCGCCCTAGCCATTTGCACCCTAGTCTTATACCTC	69 (0.000716%)	
TTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAGGACT	272 (0.001128%)	
TTTTGAGGGAAGAGGAGGAAAATTGAAGAGTGAAGATGAA	489 (0.002029%)	
TTTTTCTTCGCATTGGCCCCATCTGGGGGGAAAAAAGGAC	369 (0.001531%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTGTTTTTTTTTTT	9 (0.000037%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTATT	6 (0.000025%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	67 (0.000278%)	

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fastp 0.20.0, at 2020-04-09 09:31:43