MP5k

Summary

General

fastp version:	0.19.4 (https://github.com/OpenGene/fastp)
sequencing:	paired end (151 cycles + 151 cycles)
mean length before filtering:	151bp, 151bp
mean length after filtering:	150bp, 150bp
duplication rate:	74.374237%
Insert size peak:	271

Before filtering

total reads:	453.384920 M
total bases:	68.461123 G
Q20 bases:	63.744042 G (93.109840%)
Q30 bases:	58.425170 G (85.340653%)
GC content:	42.911627%

After filtering

total reads:	415.355490 M
total bases:	62.423641 G
Q20 bases:	59.455335 G (95.244901%)
Q30 bases:	54.991011 G (88.093244%)
GC content:	42.537040%

Filtering result

reads passed filters:	415.355490 M (91.612110%)
reads with low quality:	35.699870 M (7.874075%)
reads with too many N:	5.306000 K (0.001170%)
reads too short:	2.205046 M (0.486352%)
reads with low complexity:	119.208000 K (0.026293%)

Adapters

Adapter or bad ligation of read1

The input has little adapter percentage (~0.393032%), probably it's trimmed before.

Sequence	Occurrences
A	60887
AG	56336
AGA	59625
AGAT	56373
AGATC	

	56219
AGATCG	54965
AGATCGG	51945
AGATCGGA	53063
AGATCGGAA	50675
AGATCGGAAG	49447
AGATCGGAAGA	48934
AGATCGGAAGAG	48205
AGATCGGAAGAGC	46728
AGATCGGAAGAGCA	47147
AGATCGGAAGAGCAC	45483
AGATCGGAAGAGCACA	45498
AGATCGGAAGAGCACAC	44146
AGATCGGAAGAGCACACG	43424
AGATCGGAAGAGCACACGT	40655
AGATCGGAAGAGCACACGTC	40963
AGATCGGAAGAGCACACGTCT	39442
AGATCGGAAGAGCACACGTCTG	38767
AGATCGGAAGAGCACACGTCTGA	38513
AGATCGGAAGAGCACACGTCTGAA	38629
AGATCGGAAGAGCACACGTCTGAAC	37091
AGATCGGAAGAGCACACGTCTGAACT	35971
AGATCGGAAGAGCACACGTCTGAACTC	36226
AGATCGGAAGAGCACACGTCTGAACTCC	35999
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAATATCTCGTATGCCGTCTTCTGCTT	81903
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAATATCTCGTATGCCGTCTTCTGCTTGAAAA	106573
other adapter sequences	2028375

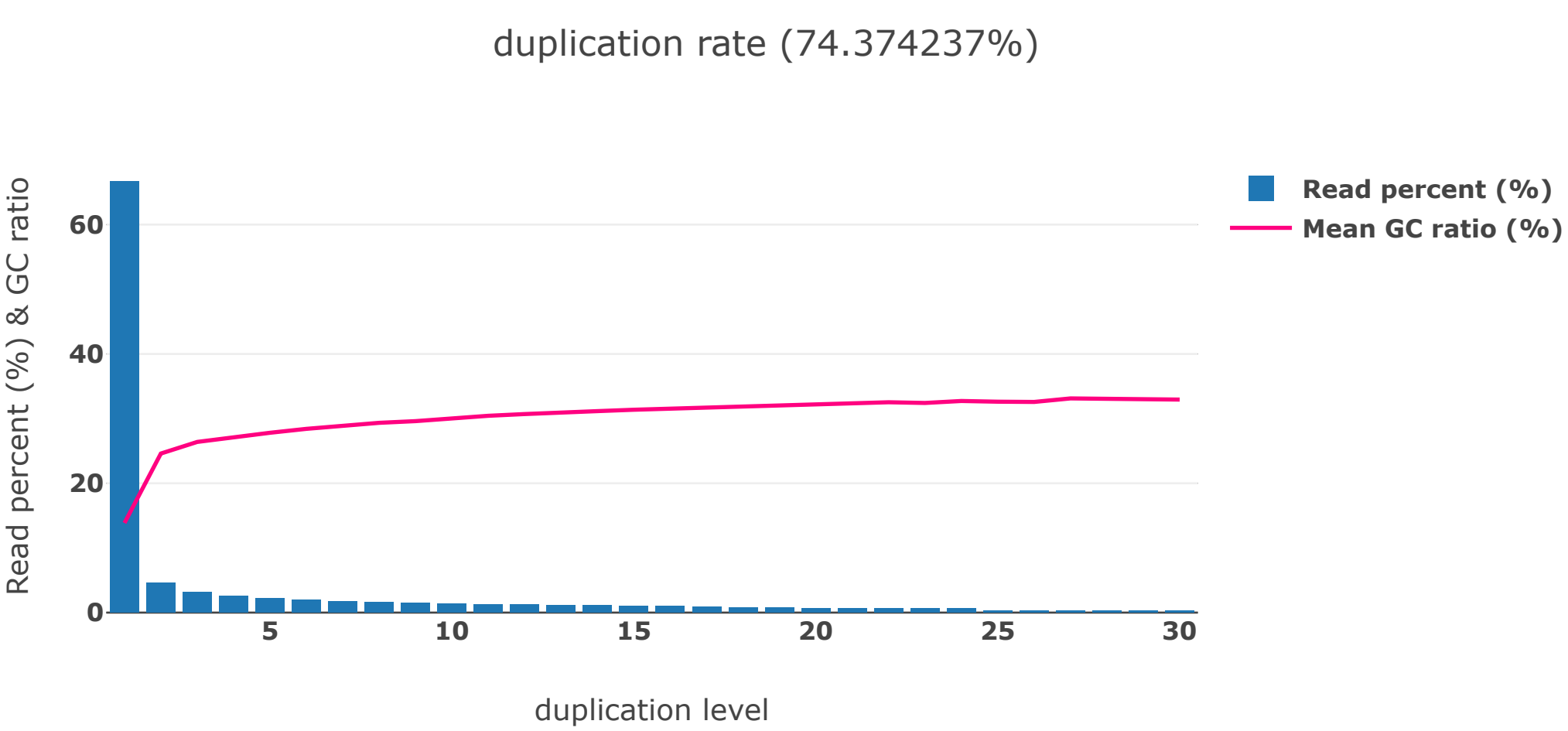
Adapter or bad ligation of read2

The input has little adapter percentage (~0.341958%), probably it's trimmed before.

Sequence	Occurrences
A	60884
AG	56287
AGA	59531
AGAT	56798
AGATC	56596
AGATCG	55683
AGATCGG	53215
AGATCGGA	53461
AGATCGGAA	50654
AGATCGGAAG	49945
AGATCGGAAGA	49061

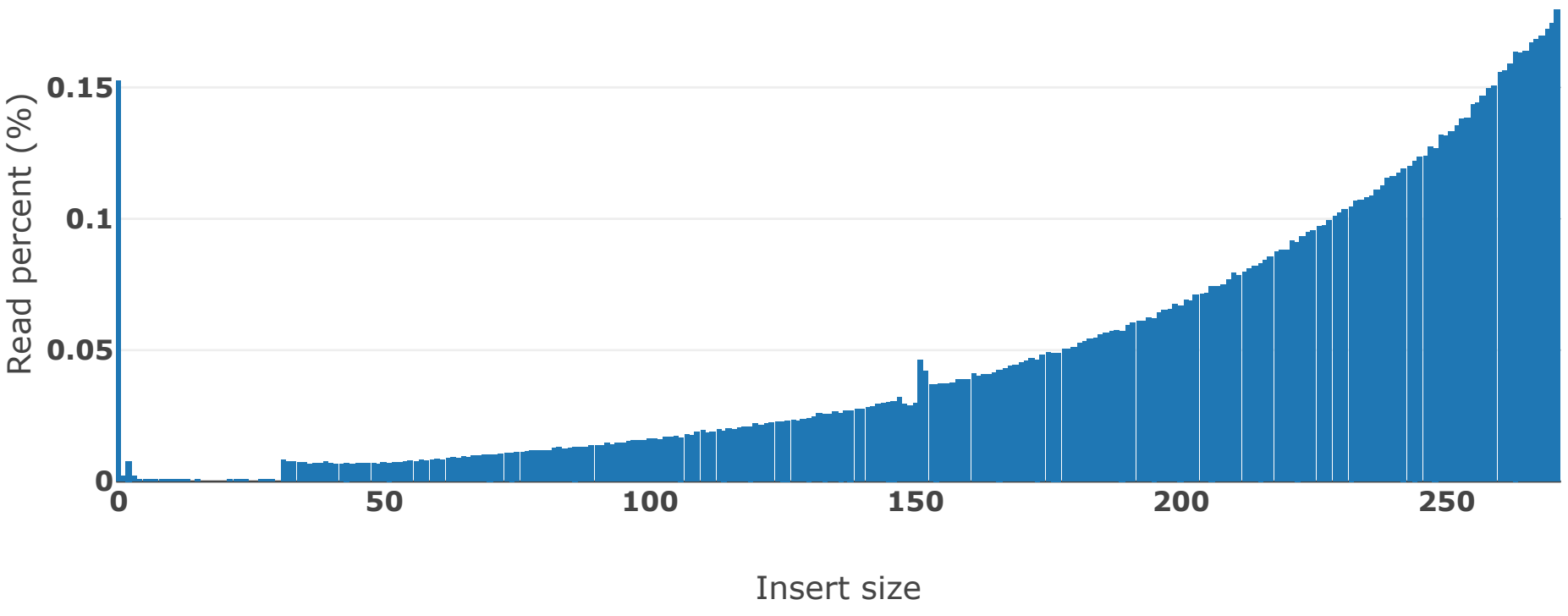
AGATCGGAAGAG	49041
AGATCGGAAGAGC	47886
AGATCGGAAGAGCG	47714
AGATCGGAAGAGCGT	43710
AGATCGGAAGAGCGTC	46224
AGATCGGAAGAGCGTCG	44456
AGATCGGAAGAGCGTCGT	42069
AGATCGGAAGAGCGTCGTG	42407
AGATCGGAAGAGCGTCGTGT	40406
AGATCGGAAGAGCGTCGTGTA	41118
AGATCGGAAGAGCGTCGTGTAG	38803
AGATCGGAAGAGCGTCGTGTAGG	47177
AGATCGGAAGAGCGTCGTGTAGGG	39973
AGATCGGAAGAGCGTCGTGTAGGGA	39555
AGATCGGAAGAGCGTCGTGTAGGGAA	35862
AGATCGGAAGAGCGTCGTGTAGGGAAA	58680
AGATCGGAAGAGCGTCGTGTAGGGAAAGA	35813
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGT	49913
AGATCGGAAGAGCGTCGTGTAGGGAAAGAGTG	59818
other adapter sequences	2071632

Duplication



Insert size estimation

Insert size distribution (87.323919% reads are with unknown length)

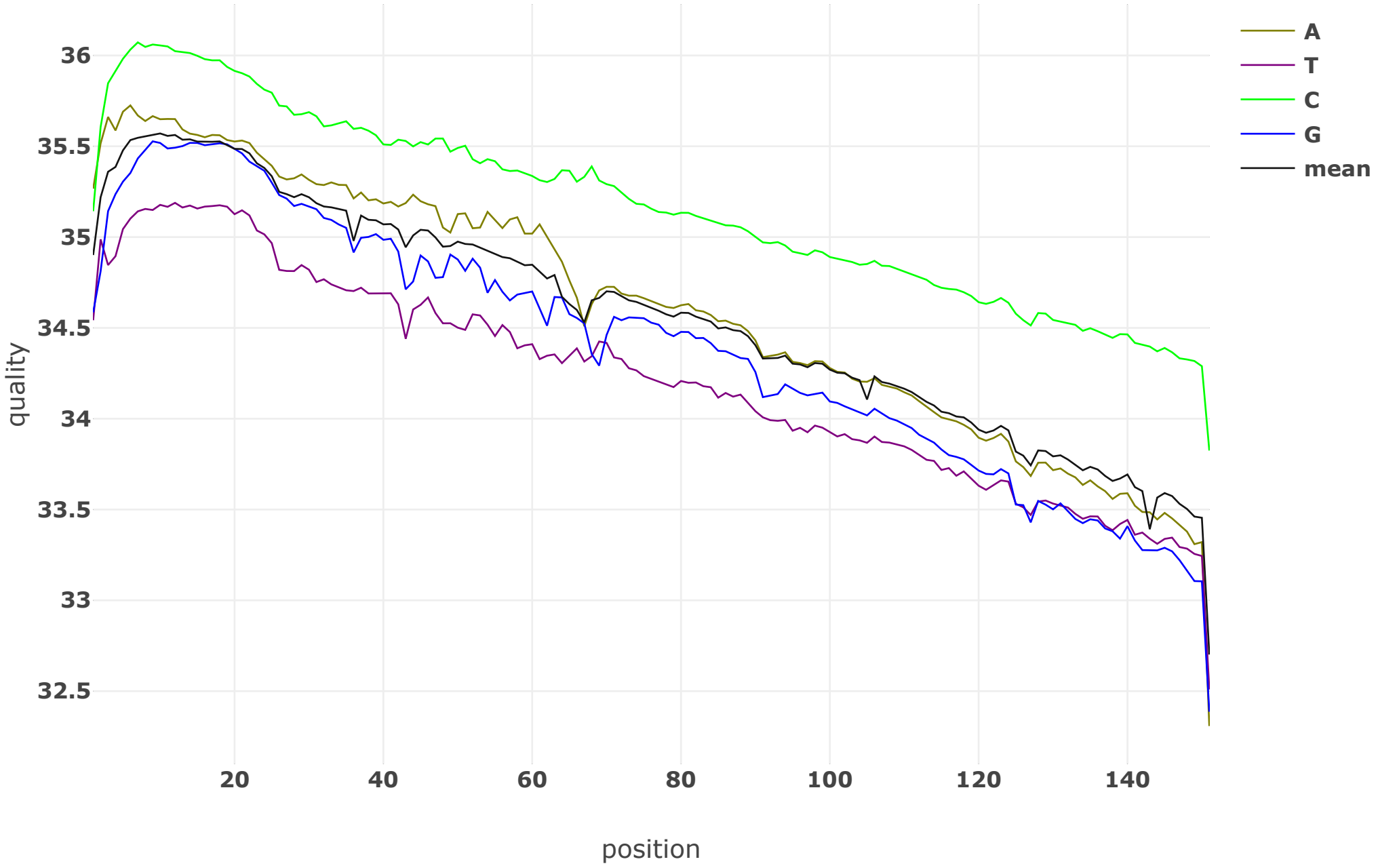


This estimation is based on paired-end overlap analysis, and there are 87.323919% reads found not overlapped.
The nonoverlapped read pairs may have insert size <30 or >272, or contain too much sequencing errors to be detected as overlapped.

Before filtering

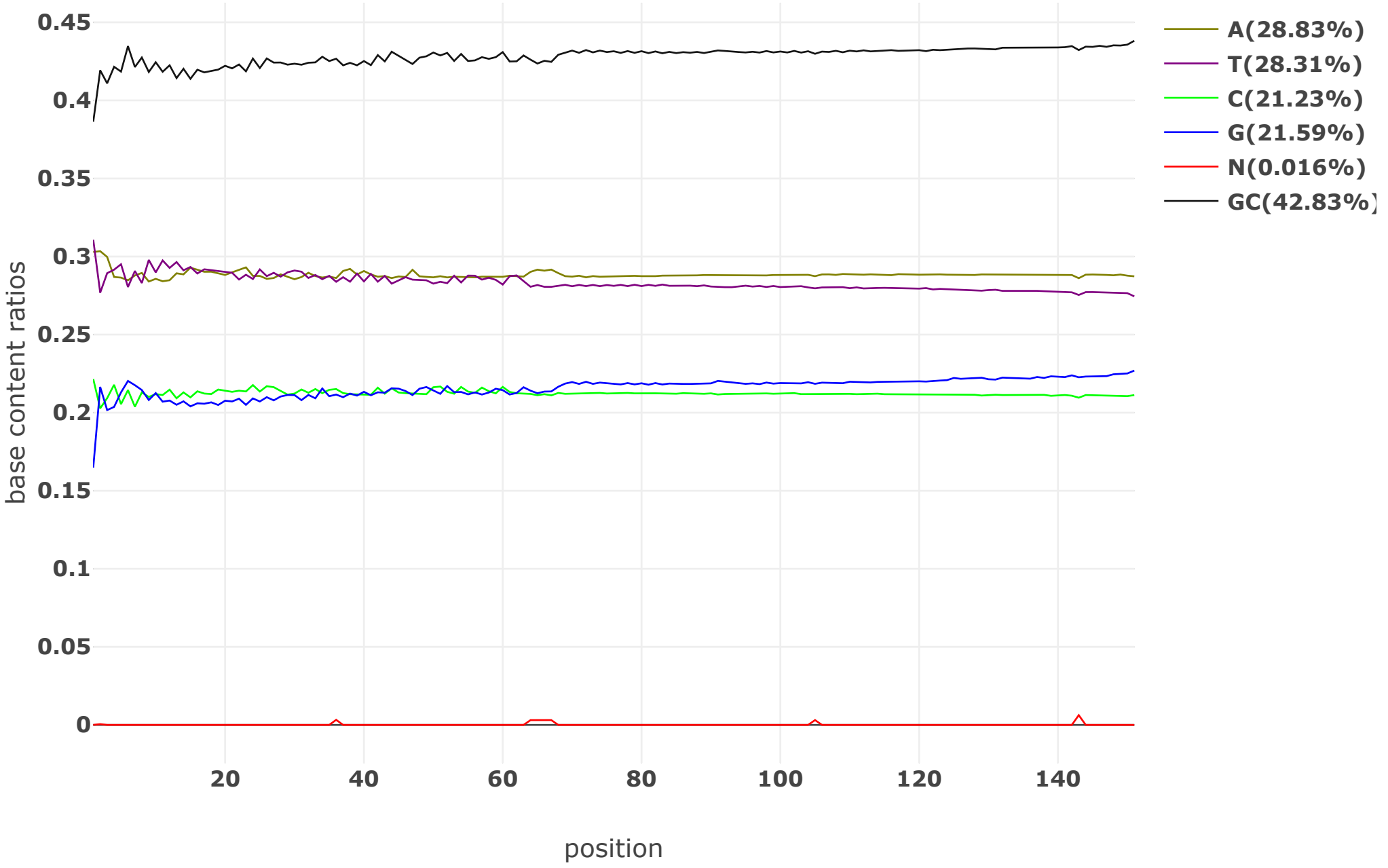
Before filtering: read1: quality

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

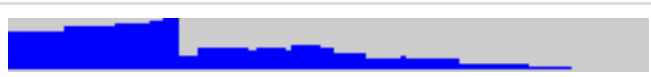
Sampling rate: 1 / 20

overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 151
AACACACACACACACACACACACACACACACACACACACA	21376 (0.049958%)	
AACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	28377 (0.066320%)	
AAGATGTGTATAAGAGACAG	241994 (0.282781%)	
ACACACACACACACACACACACACACACACACACACACAA	983 (0.002297%)	
ACACACACACACACACACACACACACACACACACACACAC	21907 (0.051199%)	
ACACACACACACACACACACACACACACACACACACACAG	651 (0.001521%)	
ACACACACACACACACACACACACACACACACACACACAT	383 (0.000895%)	
ACACACACCTGTCTCTTATACACATCTAGATGTGTATAAG	1651 (0.003859%)	
ACACACCTGTCTCTTATACACATCTAGATGTGTATAAGAG	3413 (0.007976%)	
ACACATCTAGATGTGTATAAGAGACAGGTGTGTGTGTGTG	135 (0.000316%)	
ACACCTGTCTCTTATACACATCTAGATGTGTATAAGAGAC	20557 (0.048044%)	
ACCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	24986 (0.058395%)	
ACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	1808 (0.004225%)	
ACTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	13171 (0.030782%)	
AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	15406 (0.036005%)	
AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	413 (0.002413%)	
AGATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAATATCTCGTATGCCGTCTTCTGCTTGAAAAGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	4708 (0.040986%)	
AGATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTG	16458 (0.038464%)	
AGCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	26719 (0.062445%)	
AGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	29387 (0.068680%)	

AGGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	25505 (0.059608%)	
ATACACATCTAGATGTGTATAAGAGACAGGTGTGTGTGTG	148 (0.000346%)	
ATCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	18596 (0.043461%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAATATCGCGTATGCCGTCTTCTGCTTGAAAAGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	13 (0.000113%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAATATCTCGTATGCCGTCTTCTGCTTGAAAAGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	50 (0.000435%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAATATCTCGTATGCCGTCTTCTGCTTGAAAATGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	25 (0.000218%)	
ATCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	48415 (0.113150%)	
ATGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	25870 (0.060461%)	
ATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTG	138 (0.000323%)	
ATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	20007 (0.046758%)	
CAAGATGTGTATAAGAGACA	127182 (0.148618%)	
CACACACACACACACACACACACACACACACACACACAAA	1813 (0.004237%)	
CACACACACACACACACACACACACACACACACACACACA	19935 (0.046590%)	
CACACACACACACACACACACACACACACACACACACACC	532 (0.001243%)	
CACACACACACACACACACACACACACACACACACACAGA	1188 (0.002776%)	
CACACACACACACACACACACCTGTCTCTTATACACATCT	16825 (0.039322%)	
CACACACACCTGTCTCTTATACACATCTAGATGTGTATAA	14100 (0.032953%)	
CACACACCTGTCTCTTATACACATCTAGATGTGTATAAGA	2587 (0.006046%)	
CACACCTGTCTCTTATACACATCTAGATGTGTATAAGAGA	6106 (0.014270%)	
CACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	20075 (0.046917%)	
CACTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	16073 (0.037564%)	
CAGATGTGTATAAGAGACAG	229749 (0.268472%)	
CAGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	14102 (0.032958%)	
CCAGATGTGTATAAGAGACA	127860 (0.149410%)	
CCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	60090 (0.140436%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGA	808 (0.001888%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	1738 (0.004062%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	2391 (0.005588%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGT	404 (0.000944%)	
CTCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	26103 (0.061005%)	
CTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT	7787 (0.018199%)	
CTCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	20801 (0.048614%)	
CTCTTATACACATCTAGATGTGTATAAGAGACAGCACACA	104 (0.000243%)	

CTCTTATACACATCTAGATGTGTATAAGAGACAGGTGTGT	80 (0.000187%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGAC	1573 (0.003676%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGAG	746 (0.001743%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGAT	1746 (0.004081%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCA	4792 (0.011199%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCC	2514 (0.005875%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCT	2779 (0.006495%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGA	378 (0.000883%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGC	383 (0.000895%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGG	445 (0.001040%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGT	775 (0.001811%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGTA	777 (0.001816%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGTC	1239 (0.002896%)	
CTGTCTCTTATACACATCTC	341346 (0.398879%)	
CTGTCTCTTATACACATCTG	366012 (0.427702%)	
CTGTCTCTTATACACATCTT	365226 (0.426784%)	
CTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	19812 (0.046302%)	
CTTATACACATCTAGATGTGTATAAGAGACAGCACACACA	82 (0.000192%)	
CTTATACACATCTAGATGTGTATAAGAGACAGGTGTGTGT	37 (0.000086%)	
GACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	25585 (0.059795%)	
GACTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	22219 (0.051928%)	
GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	14804 (0.034598%)	
GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG AGAGAGAGAGAGAGAGAGAGAGAGAGAGA	417 (0.002436%)	
GAGATGTGTATAAGAGACAG	199049 (0.232598%)	
GAGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	22669 (0.052980%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAATATCGCGTATGCCGTCTTCTGCTTGAAAAGGGG GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG GGGGGGG	7060 (0.061462%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAATATCTCGTATGCCGTCTTCTGCTTGAAAAGGGG GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG GGGGGGG	17832 (0.155240%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAATATCTCGTATGCCGTCTTCTGCTTGAAAATGGG GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG GGGGGGG	3617 (0.031488%)	
GATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGT	209 (0.000488%)	
GCACACACACACACACACACACACACACACACACACACAC	29522 (0.068996%)	
GCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	29617 (0.069218%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGA	2427 (0.005672%)	

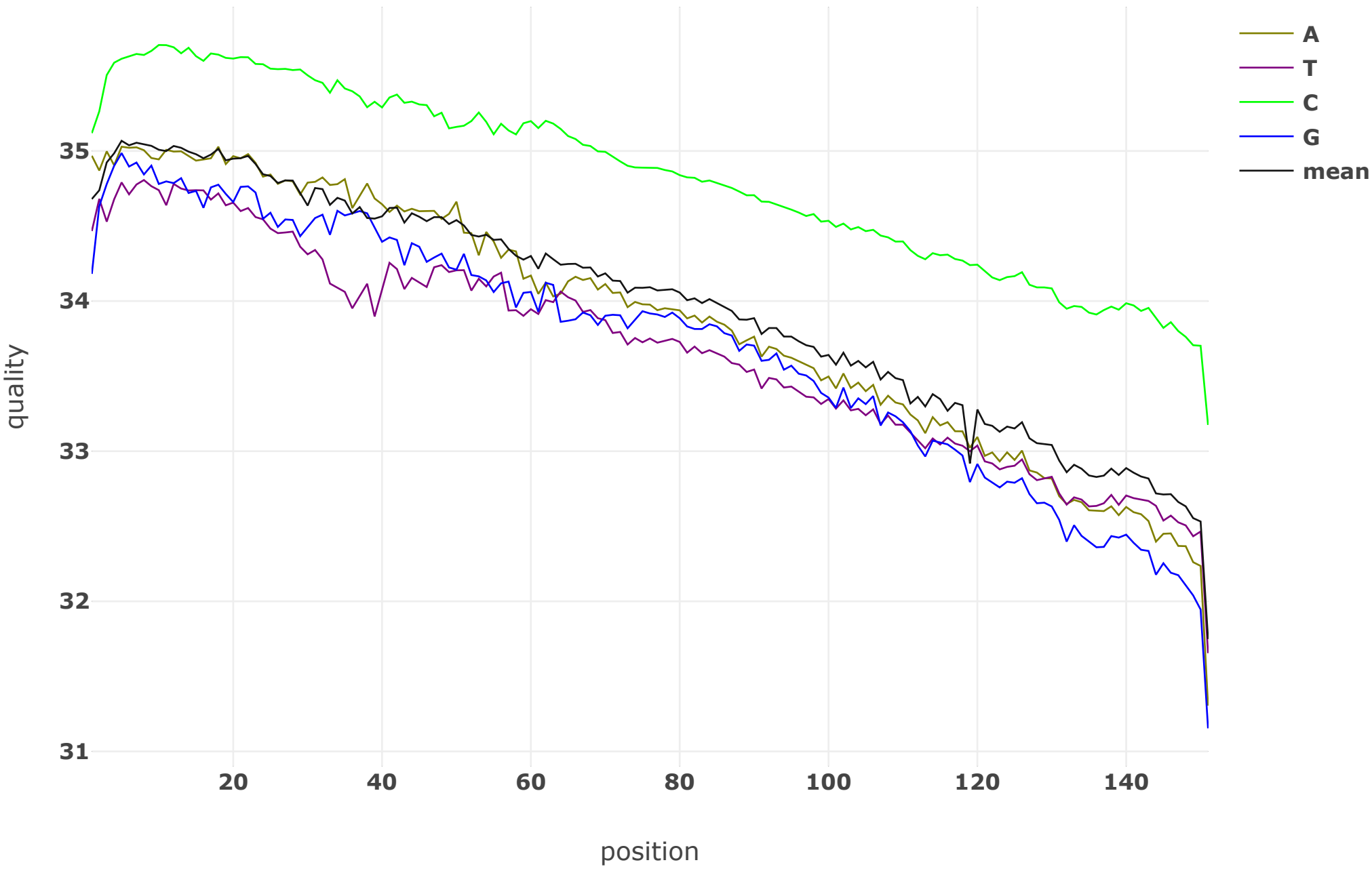
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	5375 (0.012562%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	7705 (0.018007%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGT	1224 (0.002861%)	
GGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	41191 (0.096267%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	112595 (0.263145%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG GGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1892 (0.011054%)	
GGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	11255 (0.026304%)	
GTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTGTGTG	83 (0.000194%)	
GTCTCTTATACACATCTAGATGTGTATAAGAGACAGCACA	195 (0.000456%)	
GTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTGT	156 (0.000365%)	
GTCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	39727 (0.092846%)	
GTGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	15481 (0.036181%)	
GTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTGTG	166 (0.000388%)	
GTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAGA	2710 (0.006334%)	
GTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGA	2182 (0.005100%)	
GTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAA	3256 (0.007610%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGA	1121 (0.002620%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	27971 (0.065371%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTTT	713 (0.001666%)	
TACACACACACACACACACACACACACACACACACACACA	21176 (0.049490%)	
TACACATCTAGATGTGTATAAGAGACAGGTGTGTGTGTGT	141 (0.000330%)	
TACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	33723 (0.078814%)	
TAGATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAA	17350 (0.040549%)	
TATACACATCTAGATGTGTATAAGAGACAGGTGTGTGTGT	89 (0.000208%)	
TCACACACACACACACACACACACACACACACACACACAC	19954 (0.046634%)	
TCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	31714 (0.074119%)	
TCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTC	10155 (0.023733%)	
TCTCTTATACACATCTAGATGTGTATAAGAGACAGCACAC	87 (0.000203%)	
TCTCTTATACACATCTAGATGTGTATAAGAGACAGGTGTG	75 (0.000175%)	
TCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGA	2534 (0.005922%)	
TCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	5687 (0.013291%)	
TCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	8181 (0.019120%)	
TCTTATACACATCTAGATGTGTATAAGAGACAGCACACAC	51 (0.000119%)	

TCTTATACACATCTAGATGTGTATAAGAGACAGGTGTGTG	24 (0.000056%)	
TGAGATGTGTATAAGAGACA	142130 (0.166086%)	
TGCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	23231 (0.054293%)	
TGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	29391 (0.068689%)	
TGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTGTGT	64 (0.000150%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGACA	48 (0.000112%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCAC	258 (0.000603%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCCC	102 (0.000238%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCCT	82 (0.000192%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCTC	85 (0.000199%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGAG	104 (0.000243%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGCC	73 (0.000171%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGCT	93 (0.000217%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGGG	85 (0.000199%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGGT	91 (0.000213%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTA	91 (0.000213%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTC	93 (0.000217%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTG	265 (0.000619%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTT	87 (0.000203%)	
TGTCTCTTATACACATCTCA	900 (0.001052%)	
TGTCTCTTATACACATCTGA	605 (0.000707%)	
TGTCTCTTATACACATCTGG	709 (0.000828%)	
TGTCTCTTATACACATCTTG	694 (0.000811%)	
TGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAGAC	11941 (0.027907%)	
TGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTGT	78 (0.000182%)	
TGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAG	4653 (0.010874%)	
TGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAG	2220 (0.005188%)	
TGTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATA	24584 (0.057455%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGAG	1564 (0.003655%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	9022 (0.021085%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTT	305 (0.000713%)	
TTATACACATCTAGATGTGTATAAGAGACAGCACACACAC	51 (0.000119%)	
TTATACACATCTAGATGTGTATAAGAGACAGGTGTGTGTG	51 (0.000119%)	
TTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT		

	16656 (0.038927%)	

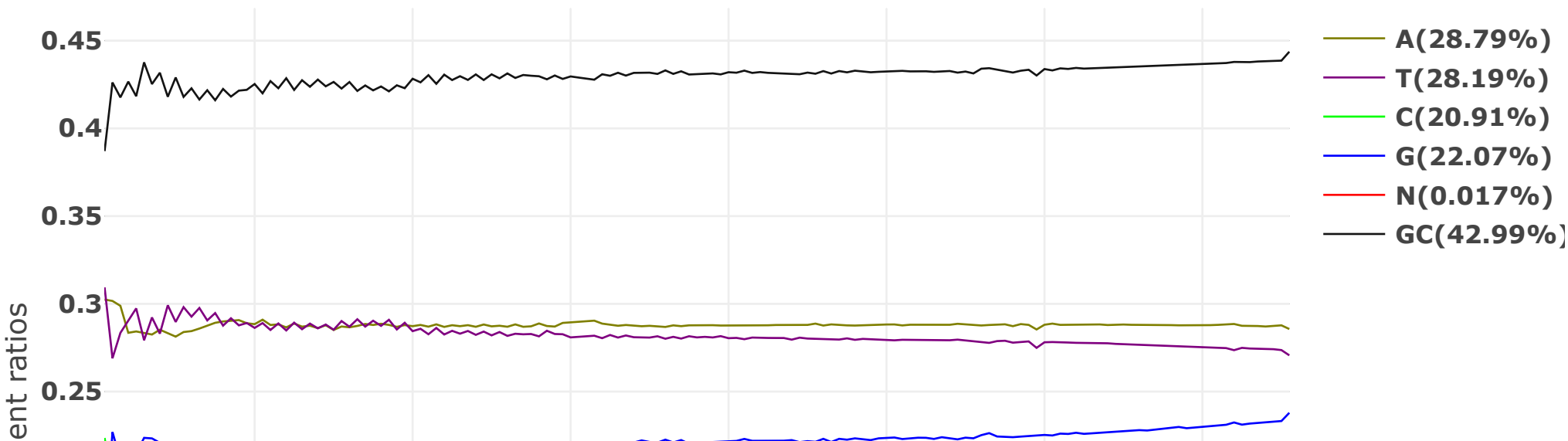
Before filtering: read2: quality

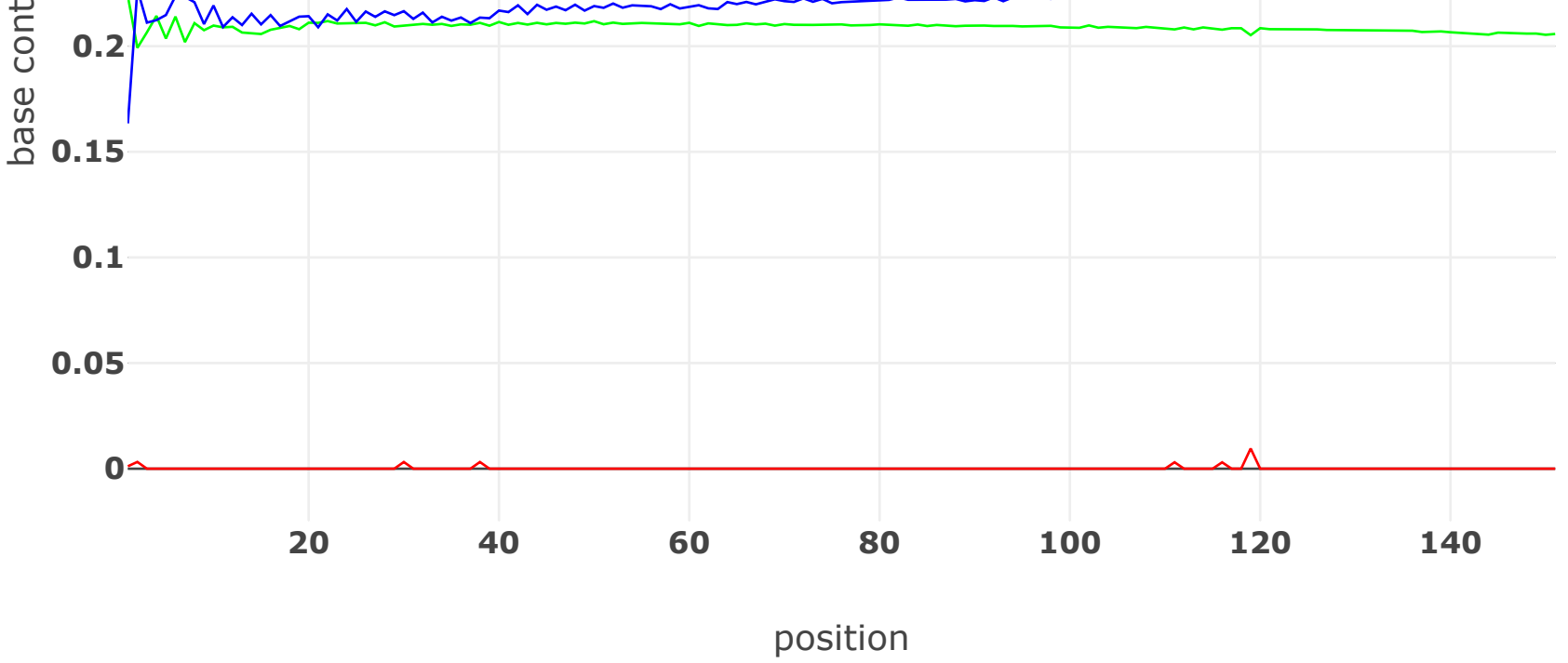
Value of each position will be shown on mouse over.



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
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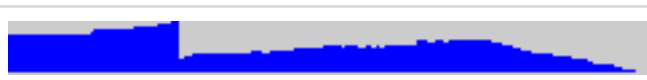
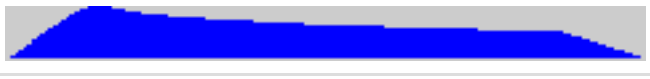
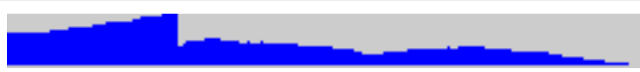
GGA	GGAAA	GGAAT	GGAAC	GGAAG	GGATA	GGATT	GGATC	GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGAGG
GGT	GGTAA	GGTAT	GGTAC	GGTAG	GGTTA	GGTTT	GGTTC	GGTTG	GGTCA	GGTCT	GGTCC	GGTCG	GGTGA	GGTGT	GGTGC	GGTGG
GGC	GGCAA	GGCAT	GGCAC	GGCAG	GGCTA	GGCTT	GGCTC	GGCTG	GGCCA	GGCCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGCGG
GGG	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 151
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	6998 (0.016355%)	
AACCCTAACCCTAACCCTAACCCTAACCCTAACCCTAACC	154 (0.000360%)	
AACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	23768 (0.055548%)	
AAGATGTGTATAAGAGACAG	242845 (0.283776%)	
ACACACACACACACACACACACACACACACACACACAA	2341 (0.005471%)	
ACACACACACACACACACACACACACACACACACACAC	54905 (0.128318%)	
ACACACACACACACACACACACACACACACACACACAG	1712 (0.004001%)	
ACACACCTGTCTCTTATACACATCTAGATGTGTATAAGAG	2882 (0.006736%)	
ACACATCTAGATGTGTATAAGAGACAGCACACACACACAC	182 (0.000425%)	
ACACCTGTCTCTTATACACATCTAGATGTGTATAAGAGAC	16832 (0.039338%)	
ACATCTAGATGTGTATAAGAGACAGCACACACACACACAC	225 (0.000526%)	
ACCCTAACCCTAACCCTAACCCTAACCCTAACCCTAACCC	220 (0.000514%)	
ACCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	21464 (0.050163%)	
ACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	1402 (0.003277%)	
ACTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	26456 (0.061830%)	
AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	14183 (0.033147%)	
AGATCGGAAGAGCGTCGTGT	108057 (0.126270%)	
AGATGTGTATAAGAGACAGCACACACACACACACACACAC	18162 (0.042446%)	
AGATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTG	16426 (0.038389%)	
AGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	37495 (0.087629%)	
AGGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	22064 (0.051566%)	
ATACACATCTAGATGTGTATAAGAGACAGCACACACACAC	169 (0.000395%)	
ATCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	40213 (0.093982%)	
ATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTG	135 (0.000316%)	
ATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	17452 (0.040787%)	
CAAGATGTGTATAAGAGACA	126163 (0.147427%)	
CACACACACACACACACACACACACACACACACACAAA	1526 (0.003566%)	
CACACACACACACACACACACACACACACACACACACA	35294 (0.082485%)	
CACACACCTGTCTCTTATACACATCTAGATGTGTATAAGA	19397 (0.045333%)	
CACACCTGTCTCTTATACACATCTAGATGTGTATAAGAGA	5126 (0.011980%)	
CACATCTAGATGTGTATAAGAGACAGCACACACACACACA	185 (0.000432%)	
CACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	16768 (0.039188%)	

CAGATGTGTATAAGAGACAG	232707 (0.271929%)	
CCAGATGTGTATAAGAGACA	130369 (0.152342%)	
CCCTAACCCTAACCCTAACCCTAACCCTAACCCTAACCCT	341 (0.000797%)	
CCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	52671 (0.123097%)	
CCTAACCCTAACCCTAACCCTAACCCTAACCCTAACCCTA	333 (0.000778%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGA	617 (0.001442%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	1335 (0.003120%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	1798 (0.004202%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGT	319 (0.000746%)	
CTAACCCTAACCCTAACCCTAACCCTAACCCTAACCCTAA	187 (0.000437%)	
CTCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	22633 (0.052895%)	
CTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT	9629 (0.022504%)	
CTCTTATACACATCTAGATGTGTATAAGAGACAGCACACA	96 (0.000224%)	
CTCTTATACACATCTAGATGTGTATAAGAGACAGGTGTGT	74 (0.000173%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGAC	4291 (0.010028%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGAT	5154 (0.012045%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCA	8837 (0.020653%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCC	4578 (0.010699%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCT	4856 (0.011349%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGA	270 (0.000631%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGC	275 (0.000643%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGG	321 (0.000750%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGT	590 (0.001379%)	
CTGTCTCTTATACACATCTC	315409 (0.368570%)	
CTGTCTCTTATACACATCTG	330654 (0.386385%)	
CTGTCTCTTATACACATCTT	332587 (0.388643%)	
CTTATACACATCTAGATGTGTATAAGAGACAGCACACACA	71 (0.000166%)	
GACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	21725 (0.050773%)	
GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	13380 (0.031270%)	
GAGATGTGTATAAGAGACAG	197777 (0.231112%)	
GAGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	22080 (0.051603%)	
GATGTGTATAAGAGACAGCACACACACACACACACACACA	178 (0.000416%)	
GATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGT	193 (0.000451%)	
GCACACACACACACACACACACACACACACACACACAC		

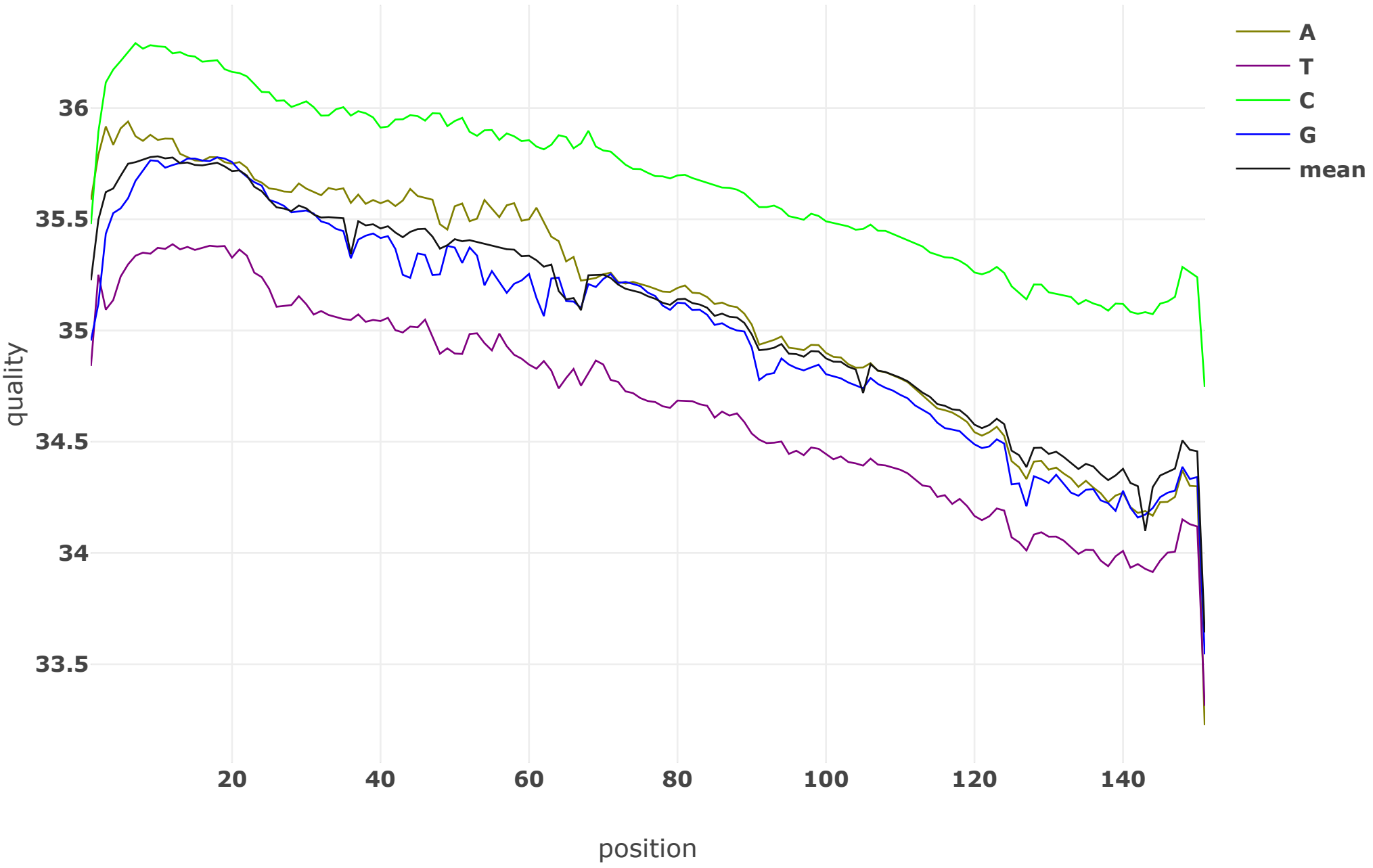
	22226 (0.051944%)	
GCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	47171 (0.110243%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGA	2019 (0.004719%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	4502 (0.010522%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	6556 (0.015322%)	
GGCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	19784 (0.046237%)	
GGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	36434 (0.085150%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	105635 (0.246879%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG GGGGGGGGGGGGGGGGGGGGGGGGGGGGG	8759 (0.051176%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG GGGGGGG	6787 (0.059085%)	
GGGGGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	13238 (0.030938%)	
GGGGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1112 (0.002599%)	
GGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	4185 (0.009781%)	
GGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	3905 (0.009126%)	
GGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	4350 (0.010166%)	
GTCTCTTATACACATCTAGATGTGTATAAGAGACAGCACA	158 (0.000369%)	
GTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTGT	122 (0.000285%)	
GTCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	33757 (0.078893%)	
GTGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	13967 (0.032642%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10379 (0.024257%)	
GTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTGTG	200 (0.000467%)	
GTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAGA	2406 (0.005623%)	
GTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGA	1823 (0.004261%)	
GTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAA	2728 (0.006376%)	
GTGTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTAT	1860 (0.004347%)	
GTGTGTGTGTGTGCTGTCTCTTATACACATCTAGATGTGT	1667 (0.003896%)	
GTGTGTGTGTGTGTGTGTGTGCTGTCTCTTATACACATCT	13390 (0.031294%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGA	1542 (0.003604%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	34421 (0.080445%)	
TAACCCTAACCCTAACCCTAACCCTAACCCTAACCCTAAC	131 (0.000306%)	
TACACATCTAGATGTGTATAAGAGACAGCACACACACACA	169 (0.000395%)	
TACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	28425 (0.066432%)	
TATACACATCTAGATGTGTATAAGAGACAGCACACACACA	127 (0.000297%)	

TCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	43752 (0.102252%)	
TCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTC	12741 (0.029777%)	
TCTCTTATACACATCTAGATGTGTATAAGAGACAGCACAC	57 (0.000133%)	
TCTCTTATACACATCTAGATGTGTATAAGAGACAGGTGTG	65 (0.000152%)	
TCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	10350 (0.024189%)	
TCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	14937 (0.034909%)	
TCTTATACACATCTAGATGTGTATAAGAGACAGCACACAC	44 (0.000103%)	
TCTTATACACATCTAGATGTGTATAAGAGACAGGTGTGTG	30 (0.000070%)	
TGAGATGTGTATAAGAGACA	142585 (0.166617%)	
TGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	46655 (0.109037%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG GGGGGGGGGGGGGGGGGGGGGGGGGGGG	5333 (0.031159%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCAC	277 (0.000647%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCCT	74 (0.000173%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCTC	107 (0.000250%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGCT	104 (0.000243%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGGG	90 (0.000210%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGGT	75 (0.000175%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTA	118 (0.000276%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTC	122 (0.000285%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTG	304 (0.000710%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTT	108 (0.000252%)	
TGTCTCTTATACACATCTCA	1069 (0.001249%)	
TGTCTCTTATACACATCTGG	950 (0.001110%)	
TGTCTCTTATACACATCTTG	871 (0.001018%)	
TGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAGAC	10397 (0.024299%)	
TGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTGT	73 (0.000171%)	
TGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAG	3780 (0.008834%)	
TGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAG	1689 (0.003947%)	
TGTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATA	3226 (0.007539%)	
TGTGTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTA	2019 (0.004719%)	
TGTGTGTGTGTGTGCTGTCTCTTATACACATCTAGATGTG	2378 (0.005558%)	
TGTGTGTGTGTGTGTGCTGTCTCTTATACACATCTAGATG	4587 (0.010720%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	37902 (0.088580%)	
TTATACACATCTAGATGTGTATAAGAGACAGCACACACAC	57 (0.000133%)	

After filtering

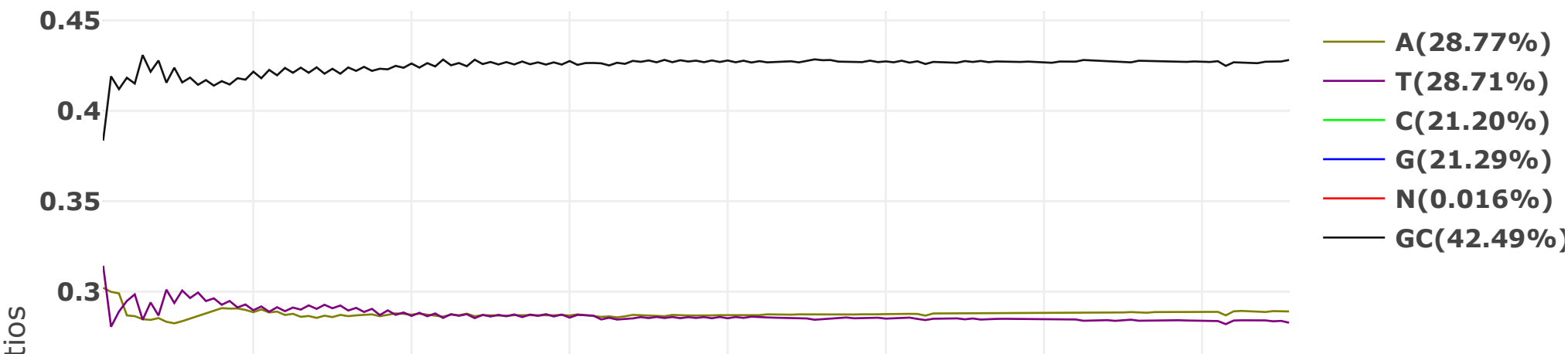
After filtering: read1: quality

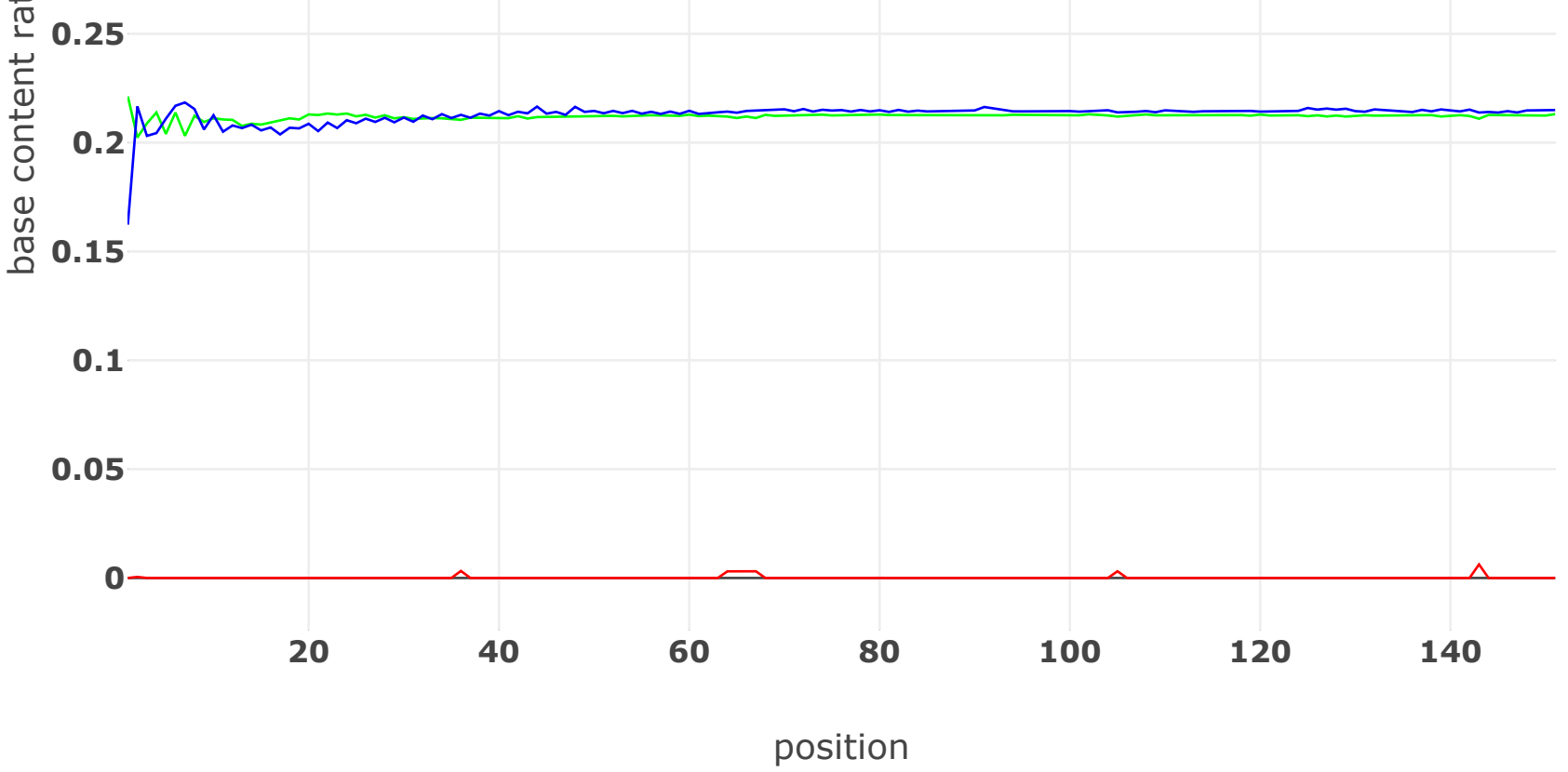
Value of each position will be shown on mouse over.



After filtering: read1: base contents

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
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CTC	CTCAA	CTCAT	CTCAC	CTCAG	CTCTA	CTCTT	CTCTC	CTCTG	CTCCA	CTCCT	CTCCC	CTCCG	CTCGA	CTCGT	CTCGC	CTCGG
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CGT	CGTAA	CGTAT	CGTAC	CGTAG	CGTTA	CGTTT	CGTTC	CGTTG	CGTCA	CGTCT	CGTCC	CGTCG	CGTGA	CGTGT	CGTGC	CGTGG
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GAA	GAAAA	GAAAT	GAAAC	GAAAG	GAATA	GAATT	GAATC	GAATG	GAACA	GAACT	GAACC	GAACG	GAAGA	GAAGT	GAAGC	GAAGG
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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
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GCT	GCTAA	GCTAT	GCTAC	GCTAG	GCTTA	GCTTT	GCTTC	GCTTG	GCTCA	GCTCT	GCTCC	GCTCG	GCTGA	GCTGT	GCTGC	GCTGG
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GGA	GGAAA	GGAAT	GGAAC	GGAAG	GGATA	GGATT	GGATC	GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGAGG
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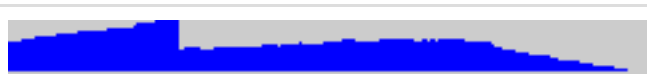
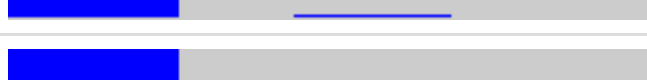
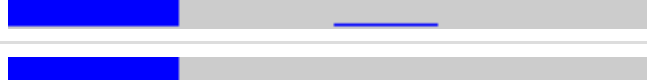
GGC	GGCAA	GGCAT	GGCAC	GGCAG	GGCTA	GGCTT	GGCTC	GGCTG	GGCCA	GGCCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGCGG
GGG	GGGAA	GGGAT	GGGAC	GGGAG	GGGTA	GGGTT	GGGTC	GGGTG	GGGCA	GGGCT	GGGCC	GGGCG	GGGGA	GGGGT	GGGGC	GGGGG

After filtering: read1: overrepresented sequences

Sampling rate: 1 / 20

overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 151
AACACACACACACACACACACACACACACACACACACACA	17586 (0.045069%)	
AACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	27073 (0.069381%)	
AAGATGTGTATAAGAGACAG	230913 (0.295886%)	
ACACACACACACACACACACACACACACACACACACACAA	596 (0.001527%)	
ACACACACACACACACACACACACACACACACACACACAC	17558 (0.044997%)	
ACACACACACACACACACACACACACACACACACACACAG	524 (0.001343%)	
ACACACACACACACACACACACACACACACACACACACAT	348 (0.000892%)	
ACACACACCTGTCTCTTATACACATCTAGATGTGTATAAG	1453 (0.003724%)	
ACACACCTGTCTCTTATACACATCTAGATGTGTATAAGAG	3299 (0.008455%)	
ACACATCTAGATGTGTATAAGAGACAGGTGTGTGTGTGTG	114 (0.000292%)	
ACACCTGTCTCTTATACACATCTAGATGTGTATAAGAGAC	19314 (0.049497%)	
ACCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	24105 (0.061775%)	
ACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	1678 (0.004300%)	
ACTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	13149 (0.033698%)	
AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	13162 (0.033731%)	
AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	370 (0.002371%)	
AGATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTG	13919 (0.035671%)	
AGCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	25284 (0.064797%)	
AGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	28643 (0.073405%)	
AGGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	24635 (0.063133%)	
ATACACATCTAGATGTGTATAAGAGACAGGTGTGTGTGTG	118 (0.000302%)	
ATCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	18023 (0.046188%)	
ATCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	46865 (0.120103%)	
ATGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	24928 (0.063884%)	
ATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTG	105 (0.000269%)	
ATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	17426 (0.044658%)	
CAAGATGTGTATAAGAGACA	120136 (0.153939%)	
CACACACACACACACACACACACACACACACACACACAAA	1287 (0.003298%)	
CACACACACACACACACACACACACACACACACACACACA	15104 (0.038708%)	
CACACACACACACACACACACACACACACACACACACACC	399 (0.001023%)	
CACACACACACACACACACACACACACACACACACACAGA	901 (0.002309%)	

CACACACACACACACACACCTGTCTCTTATACACATCT	15854 (0.040630%)	
CACACACACCTGTCTCTTATACACATCTAGATGTGTATAA	13100 (0.033572%)	
CACACACCTGTCTCTTATACACATCTAGATGTGTATAAGA	2487 (0.006374%)	
CACACCTGTCTCTTATACACATCTAGATGTGTATAAGAGA	5717 (0.014651%)	
CACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	19560 (0.050127%)	
CACTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	15239 (0.039054%)	
CAGATGTGTATAAGAGACAG	217461 (0.278649%)	
CAGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	13450 (0.034469%)	
CCAGATGTGTATAAGAGACA	121400 (0.155559%)	
CCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	58177 (0.149093%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGA	749 (0.001919%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	1575 (0.004036%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	2247 (0.005758%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGT	403 (0.001033%)	
CTCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	24814 (0.063592%)	
CTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT	5871 (0.015046%)	
CTCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	19934 (0.051086%)	
CTCTTATACACATCTAGATGTGTATAAGAGACAGCACACA	85 (0.000218%)	
CTCTTATACACATCTAGATGTGTATAAGAGACAGGTGTGT	68 (0.000174%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGAC	1543 (0.003954%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGAG	744 (0.001907%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGAT	1765 (0.004523%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCA	4421 (0.011330%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCC	2420 (0.006202%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCT	2642 (0.006771%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGA	329 (0.000843%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGC	376 (0.000964%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGG	432 (0.001107%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGT	770 (0.001973%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGTA	828 (0.002122%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGTC	1173 (0.003006%)	
CTGTCTCTTATACACATCTC	324099 (0.415292%)	
CTGTCTCTTATACACATCTG	349910 (0.448366%)	

CTGTCTCTTATACACATCTT	351544 (0.450460%)	
CTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	17384 (0.044551%)	
CTTATACACATCTAGATGTGTATAAGAGACAGCACACACA	59 (0.000151%)	
CTTATACACATCTAGATGTGTATAAGAGACAGGTGTGTGT	39 (0.000100%)	
GACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	24824 (0.063618%)	
GACTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	21452 (0.054976%)	
GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	12722 (0.032603%)	
GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	387 (0.002479%)	
GAGATGTGTATAAGAGACAG	189410 (0.242705%)	
GAGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	22105 (0.056650%)	
GATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGT	183 (0.000469%)	
GCACACACACACACACACACACACACACACACACACAC	24407 (0.062549%)	
GCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	28457 (0.072928%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGA	2335 (0.005984%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	4903 (0.012565%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	7586 (0.019441%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGT	1179 (0.003021%)	
GGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	39498 (0.101223%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	102 (0.000261%)	
GGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	9563 (0.024508%)	
GTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTGTG	50 (0.000128%)	
GTCTCTTATACACATCTAGATGTGTATAAGAGACAGCACA	175 (0.000448%)	
GTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTGT	145 (0.000372%)	
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GTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTG	147 (0.000377%)	
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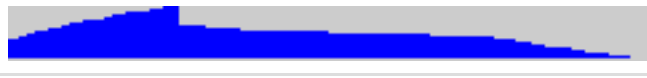
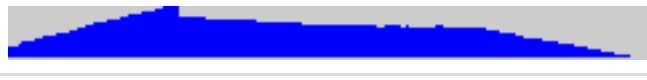
GTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGA	2028 (0.005197%)	
GTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAA	3115 (0.007983%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGA	863 (0.002212%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	24010 (0.061532%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTTT	576 (0.001476%)	
TACACACACACACACACACACACACACACACACACACA	18161 (0.046542%)	

TACACATCTAGATGTGTATAAGAGACAGGTGTGTGTGTGT	101 (0.000259%)	
TACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	32922 (0.084371%)	
TAGATCGGAAGAGCACACGTCTGAACTCCAGTCACGCCAA	365 (0.000935%)	
TATACACATCTAGATGTGTATAAGAGACAGGTGTGTGTGT	83 (0.000213%)	
TCACACACACACACACACACACACACACACACACACACAC	17187 (0.044046%)	
TCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	30526 (0.078230%)	
TCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTC	7980 (0.020451%)	
TCTCTTATACACATCTAGATGTGTATAAGAGACAGCACAC	56 (0.000144%)	
TCTCTTATACACATCTAGATGTGTATAAGAGACAGGTGTG	64 (0.000164%)	
TCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGA	2499 (0.006404%)	
TCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	5395 (0.013826%)	
TCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	7965 (0.020412%)	
TCTTATACACATCTAGATGTGTATAAGAGACAGCACACAC	32 (0.000082%)	
TCTTATACACATCTAGATGTGTATAAGAGACAGGTGTGTG	16 (0.000041%)	
TGAGATGTGTATAAGAGACA	135878 (0.174111%)	
TGCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	22457 (0.057552%)	
TGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	28453 (0.072918%)	
TGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTGT	41 (0.000105%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGACA	64 (0.000164%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCAC	218 (0.000559%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCCC	75 (0.000192%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCCT	74 (0.000190%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCTC	89 (0.000228%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGAG	100 (0.000256%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGCC	74 (0.000190%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGCT	91 (0.000233%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGGG	86 (0.000220%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGGT	92 (0.000236%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTA	99 (0.000254%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTC	119 (0.000305%)	
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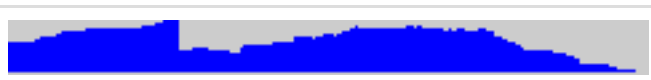
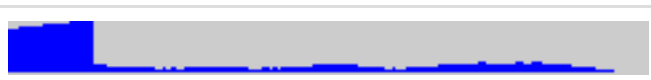
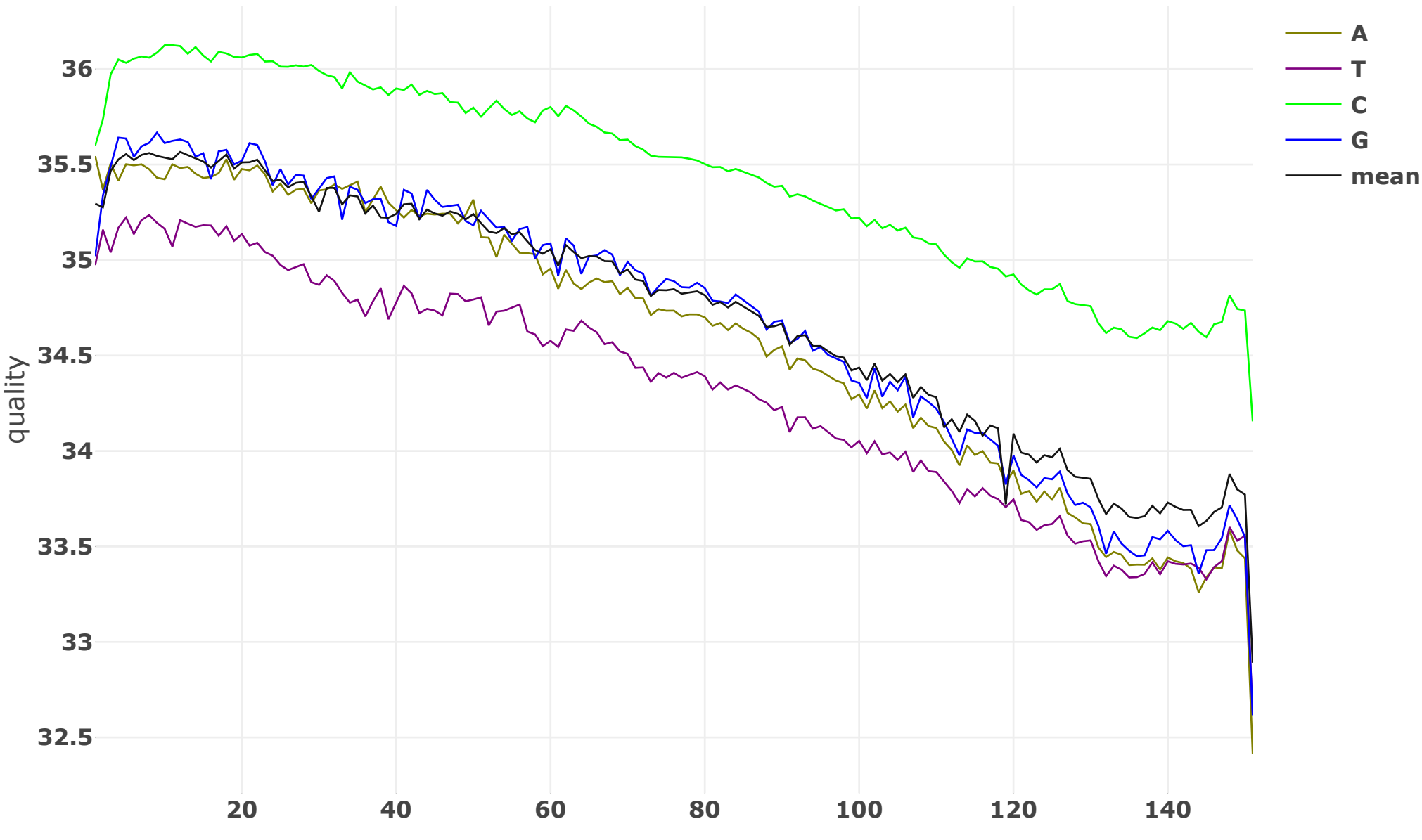
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTT	74 (0.000190%)	
TGTCTCTTATACACATCTCA	784 (0.001005%)	
TGTCTCTTATACACATCTGA	568 (0.000728%)	

TGTCTCTTATACACATCTGG	644 (0.000825%)	
TGTCTCTTATACACATCTTG	722 (0.000925%)	
TGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAGAC	11646 (0.029846%)	
TGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGT	45 (0.000115%)	
TGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAG	4344 (0.011133%)	
TGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAG	2047 (0.005246%)	
TGTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATA	23328 (0.059784%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGAG	1113 (0.002852%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	6970 (0.017862%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTT	205 (0.000525%)	
TTATACACATCTAGATGTGTATAAGAGACAGCACACACAC	35 (0.000090%)	
TTATACACATCTAGATGTGTATAAGAGACAGGTGTGTGTG	50 (0.000128%)	
TTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	14444 (0.037016%)	

After filtering: read2: quality

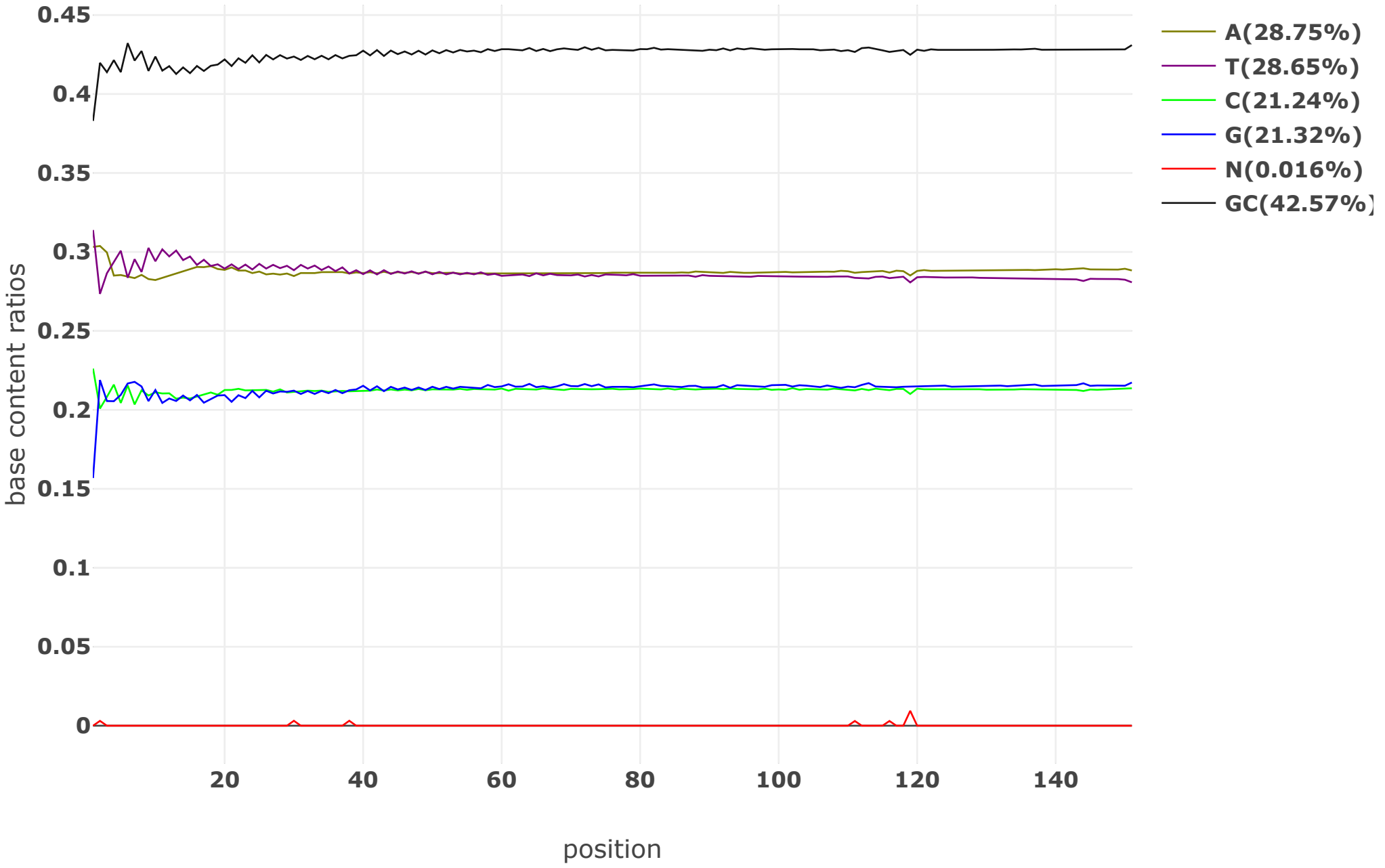
Value of each position will be shown on mouse over.



position

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.

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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
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ATA	ATAAA	ATAAT	ATAAC	ATAAG	ATATA	ATATT	ATATC	ATATG	ATACA	ATACT	ATACC	ATACG	ATAGA	ATAGT	ATAGC	ATAGG
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ACC	ACCAA	ACCAT	ACCAC	ACCAG	ACCTA	ACCTT	ACCTC	ACCTG	ACCCA	ACCCT	ACCCC	ACCCG	ACCGA	ACCGT	ACCGC	ACCGG
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CAA	CAAAA	CAAAT	CAAAC	CAAAG	CAATA	CAATT	CAATC	CAATG	CAACA	CAACT	CAACC	CAACG	CAAGA	CAAGT	CAAGC	CAAGG
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CCT	CCTAA	CCTAT	CCTAC	CCTAG	CCTTA	CCTTT	CCTTC	CCTTG	CCTCA	CCTCT	CCTCC	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
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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
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GGA	GGAAA	GGAAT	GGAAC	GGAAG	GGATA	GGATT	GGATC	GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGAGG
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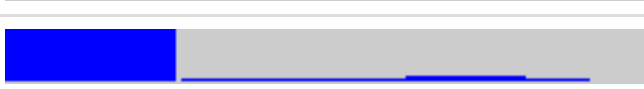
GGC	GGCAA	GGCAT	GGCAC	GGCAG	GGCTA	GGCTT	GGCTC	GGCTG	GGCCA	GGCCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGCGG
GGG	GGGAA	GGGAT	GGGAC	GGGAG	GGGTA	GGGTT	GGGTC	GGGTG	GGGCA	GGGCT	GGGCC	GGGCG	GGGGA	GGGGT	GGGGC	GGGGG

After filtering: read2: overrepresented sequences

Sampling rate: 1 / 20

overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 151
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	205 (0.000526%)	
AACCCTAACCCTAACCCTAACCCTAACCCTAACCCTAACC	84 (0.000215%)	
AACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	22991 (0.058938%)	
AAGATGTGTATAAGAGACAG	235781 (0.302214%)	
ACACACACACACACACACACACACACACACACACACAA	1782 (0.004568%)	
ACACACACACACACACACACACACACACACACACACAC	47217 (0.121041%)	
ACACACACACACACACACACACACACACACACACACAG	1368 (0.003507%)	
ACACACCTGTCTCTTATACACATCTAGATGTGTATAAGAG	2811 (0.007206%)	
ACACATCTAGATGTGTATAAGAGACAGCACACACACACAC	140 (0.000359%)	
ACACCTGTCTCTTATACACATCTAGATGTGTATAAGAGAC	16714 (0.042847%)	
ACATCTAGATGTGTATAAGAGACAGCACACACACACACAC	201 (0.000515%)	
ACCCTAACCCTAACCCTAACCCTAACCCTAACCCTAACCC	120 (0.000308%)	
ACCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	20948 (0.053700%)	
ACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	1307 (0.003351%)	
ACTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	25837 (0.066233%)	
AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	11935 (0.030596%)	
AGATCGGAAGAGCGTCGTGT	2420 (0.003102%)	
AGATGTGTATAAGAGACAGCACACACACACACACACACAC	16688 (0.042780%)	
AGATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTG	14597 (0.037420%)	

AGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	36972 (0.094778%)	
AGGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	21160 (0.054244%)	
ATACACATCTAGATGTGTATAAGAGACAGCACACACACAC	134 (0.000344%)	
ATCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	39212 (0.100520%)	
ATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTG	77 (0.000197%)	
ATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	14944 (0.038309%)	
CAAGATGTGTATAAGAGACA	122437 (0.156934%)	
CACACACACACACACACACACACACACACACACACACAAA	1158 (0.002969%)	
CACACACACACACACACACACACACACACACACACACACA	30179 (0.077364%)	
CACACACCTGTCTCTTATACACATCTAGATGTGTATAAGA	18652 (0.047815%)	
CACACCTGTCTCTTATACACATCTAGATGTGTATAAGAGA	4839 (0.012405%)	
CACATCTAGATGTGTATAAGAGACAGCACACACACACACA	203 (0.000520%)	
CACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	16530 (0.042375%)	
CAGATGTGTATAAGAGACAG	225381 (0.288884%)	
CCAGATGTGTATAAGAGACA	125440 (0.160784%)	
CCCTAACCCTAACCCTAACCCTAACCCTAACCCTAACCCT	236 (0.000605%)	
CCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	50996 (0.130729%)	
CCTAACCCTAACCCTAACCCTAACCCTAACCCTAACCCTA	290 (0.000743%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGA	560 (0.001436%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	1248 (0.003199%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	1755 (0.004499%)	
CCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGT	312 (0.000800%)	
CTAACCCTAACCCTAACCCTAACCCTAACCCTAACCCTAA	123 (0.000315%)	
CTCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	21831 (0.055964%)	
CTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT	8091 (0.020741%)	
CTCTTATACACATCTAGATGTGTATAAGAGACAGCACACA	78 (0.000200%)	
CTCTTATACACATCTAGATGTGTATAAGAGACAGGTGTGT	53 (0.000136%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGAC	4166 (0.010680%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGAT	5107 (0.013092%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCA	8234 (0.021108%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCC	4389 (0.011251%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCT	4619 (0.011841%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGA	269 (0.000690%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGC	296 (0.000759%)	

CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGG	277 (0.000710%)	
CTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGT	547 (0.001402%)	
CTGTCTCTTATACACATCTC	306892 (0.393361%)	
CTGTCTCTTATACACATCTG	322386 (0.413220%)	
CTGTCTCTTATACACATCTT	324030 (0.415328%)	
CTTATACACATCTAGATGTGTATAAGAGACAGCACACACA	64 (0.000164%)	
GACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	21260 (0.054500%)	
GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	11121 (0.028509%)	
GAGATGTGTATAAGAGACAG	192150 (0.246290%)	
GAGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	21242 (0.054454%)	
GATGTGTATAAGAGACAGCACACACACACACACACACACA	171 (0.000438%)	
GATGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGT	155 (0.000397%)	
GCACACACACACACACACACACACACACACACACACACAC	19319 (0.049525%)	
GCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	45773 (0.117340%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGA	2046 (0.005245%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	4306 (0.011038%)	
GCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	6431 (0.016486%)	
GGCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	19187 (0.049186%)	
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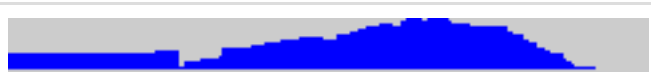
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	46 (0.000118%)	
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GTGCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	13408 (0.034372%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	7 (0.000018%)	
GTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGTGTG	144 (0.000369%)	
GTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAGA	2268 (0.005814%)	
GTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGA	1797 (0.004607%)	
GTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAA	2654 (0.006804%)	
GTGTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTAT	1653 (0.004237%)	
GTGTGTGTGTGTGCTGTCTCTTATACACATCTAGATGTGT	1586 (0.004066%)	
GTGTGTGTGTGTGTGTGTGCTGTCTCTTATACACATCT	13100 (0.033582%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGA	1136 (0.002912%)	

		
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	29261 (0.075011%)	
TAACCCTAACCCTAACCCTAACCCTAACCCTAACCCTAAC	80 (0.000205%)	
TACACATCTAGATGTGTATAAGAGACAGCACACACACACA	135 (0.000346%)	
TACCTGTCTCTTATACACATCTAGATGTGTATAAGAGACA	27647 (0.070873%)	
TATACACATCTAGATGTGTATAAGAGACAGCACACACACA	87 (0.000223%)	
TCCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAG	43029 (0.110305%)	
TCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTC	11010 (0.028224%)	
TCTCTTATACACATCTAGATGTGTATAAGAGACAGCACAC	61 (0.000156%)	
TCTCTTATACACATCTAGATGTGTATAAGAGACAGGTGTG	43 (0.000110%)	
TCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGC	10010 (0.025661%)	
TCTGTCTCTTATACACATCTAGATGTGTATAAGAGACAGG	14577 (0.037368%)	
TCTTATACACATCTAGATGTGTATAAGAGACAGCACACAC	42 (0.000108%)	
TCTTATACACATCTAGATGTGTATAAGAGACAGGTGTGTG	15 (0.000038%)	
TGAGATGTGTATAAGAGACA	138226 (0.177172%)	
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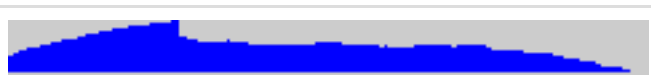
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGCAC	266 (0.000682%)	
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TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGGT	91 (0.000233%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTA	107 (0.000274%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTC	113 (0.000290%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTG	249 (0.000638%)	
TGTCTCTTATACACATCTAGATGTGTATAAGAGACAGGTT	92 (0.000236%)	
TGTCTCTTATACACATCTCA	1030 (0.001320%)	
TGTCTCTTATACACATCTGG	858 (0.001100%)	
TGTCTCTTATACACATCTTG	828 (0.001061%)	
TGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAGAC	9947 (0.025499%)	
TGTGTATAAGAGACAGGTGTGTGTGTGTGTGTGTGTGT	47 (0.000120%)	
TGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAGAG	3615 (0.009267%)	
TGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATAAG	1628 (0.004173%)	
TGTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTATA	3092 (0.007926%)	

		
TGTGTGTGTGTGCTGTCTCTTATACACATCTAGATGTGTA	2013 (0.005160%)	
TGTGTGTGTGTGCTGTCTCTTATACACATCTAGATGTG	2238 (0.005737%)	
TGTGTGTGTGTGTGCTGTCTCTTATACACATCTAGATG	4450 (0.011408%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	31211 (0.080010%)	
TTATACACATCTAGATGTGTATAAGAGACAGCACACACAC	45 (0.000115%)	

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-cut_by_quality5 --cut_window_size=4 --cut_mean_quality=20 --trim_poly_g --poly_g_min_len=10 --overrepresentation_analysis --
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