MP10k_unk

Summary

General

fastp version:	0.19.6 (https://github.com/OpenGene/fastp)
sequencing:	paired end (151 cycles + 151 cycles)
mean length before filtering:	150bp, 150bp
mean length after filtering:	150bp, 150bp
duplication rate:	43.016736%
Insert size peak:	0

Before filtering

total reads:	105.959038 M
total bases:	15.963794 G
Q20 bases:	14.220900 G (89.082208%)
Q30 bases:	12.741634 G (79.815824%)
GC content:	46.867039%

After filtering

total reads:	80.067256 M
total bases:	12.031544 G
Q20 bases:	11.330858 G (94.176258%)
Q30 bases:	10.370076 G (86.190729%)
GC content:	42.759669%

Filtering result

reads passed filters:	80.067256 M (75.564348%)
reads with low quality:	22.907050 M (21.618779%)
reads with too many N:	1.380000 K (0.001302%)
reads too short:	2.851036 M (2.690696%)
reads with low complexity:	132.316000 K (0.124875%)

Adapters

Adapter or bad ligation of read1

The input has little adapter percentage (~0.018158%), probably it's trimmed before.

Sequence	0ccurrences
all adapter sequences	21157

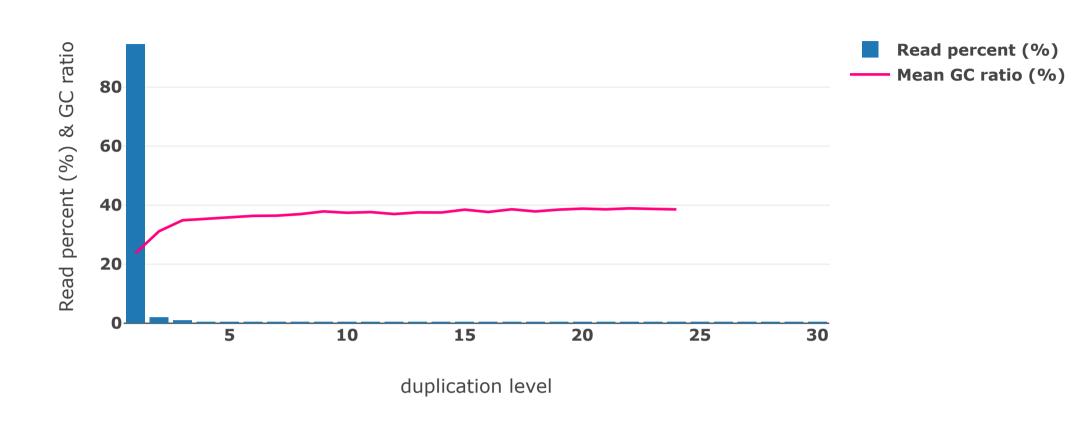
Adapter or bad ligation of read2

The input has little adapter percentage (~0.016919%), probably it's trimmed before.

Sequence	Occurrences
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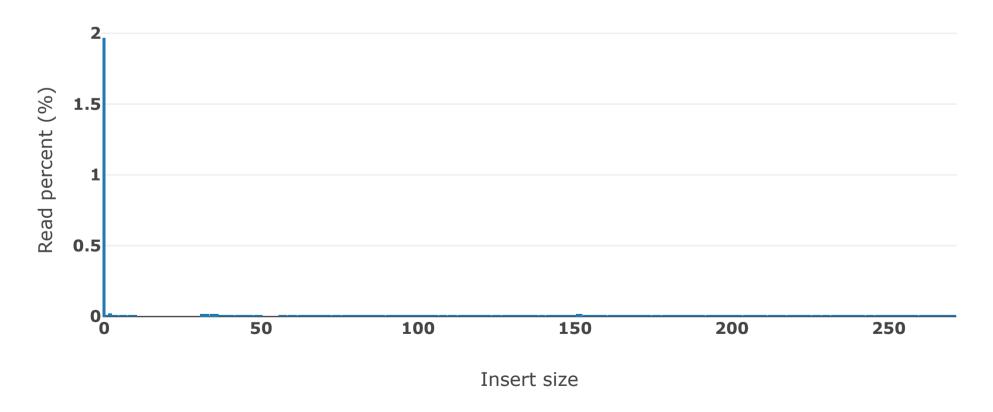
Duplication

duplication rate (43.016736%)



Insert size estimation

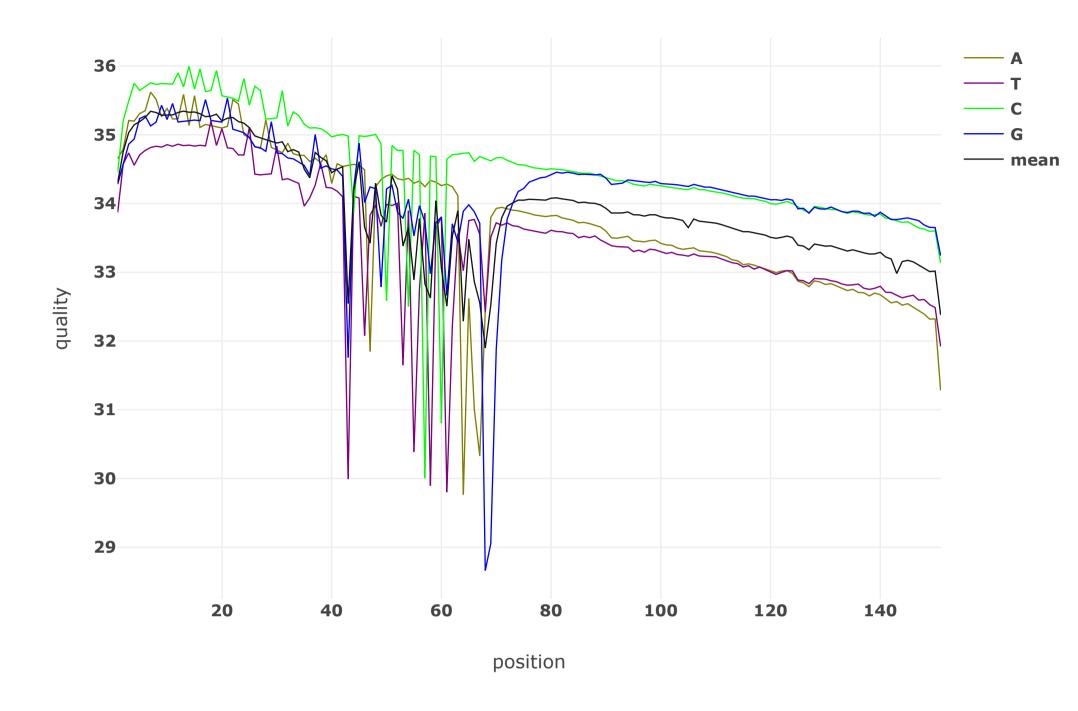
Insert size distribution (97.026707% reads are with unknown length)



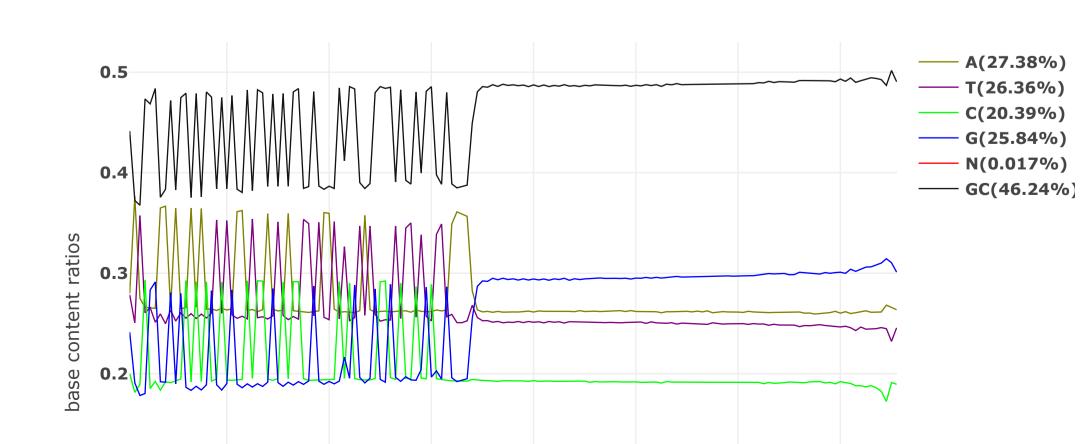
This estimation is based on paired—end overlap analysis, and there are 97.026707% reads found not overlapped. The nonoverlapped read pairs may have insert size <30 or >272, or contain too much sequencing errors to be detected as overlapped.

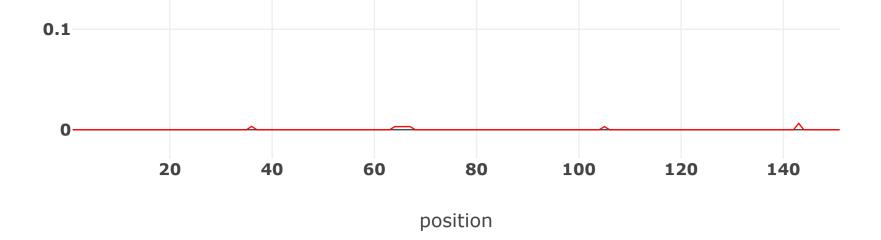
Before filtering

Before filtering: read1: quality



Before filtering: read1: base contents





Before filtering: read1: KMER counting

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

Dair		kgi ouliu		Larger	Counts		Oulit Wi		SIIOWII OI	o -	over.				0.0	00
	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	ACCAT	ACCAC	ACCAC	ACTTA	ACCTT	ACCTC	ACCTC	ACTCA	ACCCT	ACTCC	ACTCG	ACCGA	ACCGT	ACCCC	ACCCC
ACC	ACCAA	ACCAT	ACCAC	ACCAG	ACCTA	ACCTT	ACCTC ACGTC	ACCTG	ACCCA	ACCCT	ACCCC	ACCCG	ACCGA	ACCGT	ACCGC ACGGC	ACCGG
ACG	ACGAA AGAAA	ACGAT AGAAT	ACGAC AGAAC	ACGAG AGAAG	ACGTA AGATA	ACGTT AGATT	AGATC	ACGTG AGATG	ACGCA AGACA	ACGCT AGACT	ACGCC AGACC	ACGCG AGACG	ACGGA AGAGA	ACGGT AGAGT	ACGGC	ACGGG AGAGG
AGA																
AGT	AGTAA AGCAA	AGTAT	AGTAC	AGTAG	AGTTA	AGTTT	AGTTC	AGTTG	AGTCA	AGTCT	AGTCC	AGTCG	AGTGA	AGTGT	AGTGC AGCGC	AGTGG
AGC	AGGAA	AGCAT AGGAT	AGCAC AGGAC	AGCAG AGGAG	AGCTA AGGTA	AGCTT AGGTT	AGCTC AGGTC	AGCTG AGGTG	AGCCA AGGCA	AGCCT AGGCT	AGCCC AGGCC	AGCCG AGGCG	AGCGA AGGGA	AGCGT AGGGT	AGGGC	AGCGG AGGGG
TAA	TAAAA	TAAAT		TAAAG	TAATA	TAATT	TAATC	TAATG	TAACA	TAACT	TAACC	TAACG	TAAGA	TAAGT	TAAGC	TAAGG
TAT	TATAA	TATAT	TAAAC	TATAG	TATTA	TATTT	TATTC	TATTG	TATCA	TATCT	TATCC	TATCG	TATGA	TATGT	TATGC	TATGG
	TACAA	TACAT	TATAC TACAC	TACAG	TACTA	TACTT	TACTC	TACTG	TACCA	TACCT	TACCC	TACCG	TACGA	TACGT	TACGC	TACGG
TAC	TAGAA	TAGAT	TAGAC	TAGAG	TAGTA	TAGTT	TAGTC	TAGTG	TAGCA	TAGCT	TAGCC	TAGCG	TAGGA	TAGGT	TAGGC	TAGGG
TTA	TAGAA	TTAGAT	TAGAC	TAGAG	TTATA	TTATT	TTATC	TTATG	TTACA	TTACT	TTACC	TAGCG	TTAGGA	TTAGGT	TAGGC	TAGGG
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	ТССТС	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	СТСТА	СТСТТ	СТСТС	СТСТС	CTCCA	стсст	СТССС	CTCCG	CTCGA	СТССТ	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	ССТТС	CCTTG	CCTCA	ССТСТ	ССТСС	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	СССТС	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		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						
АААААААА	43611 (0.109281%)							
AACACACACACACACACACACACACACACACACACACACA	6195 (0.062094%)							

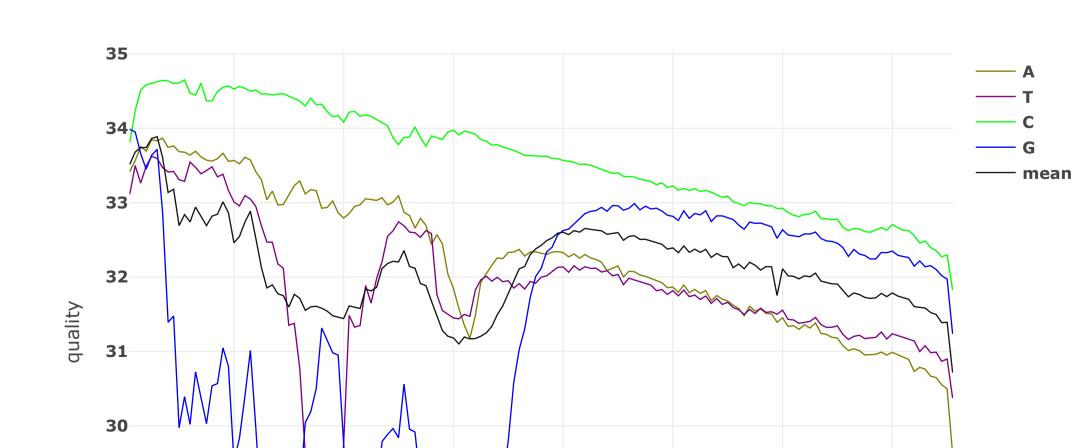
ACACACACACACACACACACACACACACACACACA	267 (0.002676%)	
AC	6431 (0.064460%)	
ACACACACACACACACACACACACACACACACACACA	175 (0.001754%)	
AG	3826 (0.038349%)	
AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	132 (0.003308%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCGGCTTGAAAAGGGGG GGGGGGGGGG	3 (0.000112%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCTGCGTGAAAAGGGGG GGGGGGGGGG	9 (0.000336%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCTGCTTGAAAAAGGGG GGGGGGGGGG	32 (0.001195%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCTGCTTGAAAAGGGGG GGGGGGGGGG	56 (0.002091%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCTGCTTGAAAATGGGGGGGG	11 (0.000411%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCTGCTTGTAAAGGGGG GGGGGGGGGG	7 (0.000261%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCGTCTGCTTGAAAAGGGGG GGGGGGGGGG	4 (0.000149%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCGGCGTGAAAAGGGGGGGG	5 (0.000187%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCGGCTTGAAAAAGGGGGGGG	10 (0.000373%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCGGCTTGAAAAGGGGG GGGGGGGGGG	14 (0.000523%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCGGCTTGAAAATGGGGGGGG	5 (0.000187%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCGTGAAAAGGGGG GGGGGGGGGG	18 (0.000672%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCGTGAAAATGGGGGGGG	2 (0.000075%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAAAGGGG GGGGGGGGGG	130 (0.004854%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAAATGGG GGGGGGGGGG	15 (0.000560%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAAGGGGG GGGGGGGGGG	146 (0.005451%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAAGTGGG GGGGGGGGGG	12 (0.000448%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAATGGGGGGGG	56 (0.002091%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAATTGGGGGGGG	4 (0.000149%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGTAAAGGGGG GGGGGGGGGG	7 (0.000261%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGTAAATGGGGGGGG	11 (0.000411%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATTCCGTCTTCTGCTTGAAAAAGGGGGGGG	19 (0.000709%)	
ATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTTTGCCGTCTTCTGCTTGAAAAGGGGG GGGGGGGGGG	2 (0.000075%)	

ATGCCGGCTTCGGCTTGAAAAGGGGGGGGGGGGGGGGGG	17 (0.000426%)	
ATGCCGGCTTCTGCTTGAAAAGGGGGGGGGGGGGGGGGG	41 (0.001027%)	
ATGCCGTCGTCGGCTTGAAAAGGGGGGGGGGGGGGGGGG	522 (0.013080%)	
ATGCCGTCTTCGGCGTGAAAATGGGGGGGGGGGGGGGGG	11 (0.000276%)	
ATGCCGTCTTCGGCTTGTAAAGGGGGGGGGGGGGGGGGG	36 (0.000902%)	
ATGCCGTCTTCTGCGTGAAAAAGGGGGGGGGGGGGGGGG	58 (0.001453%)	
ATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	5176 (0.051881%)	
CACACACACACACACACACACACACACACACAAA	425 (0.004260%)	
CACACACACACACACACACACACACACACACACACA	5660 (0.056732%)	
CACACACACACACACACACACACACACACACACACAGA	229 (0.002295%)	
CACACACACACACACT	21241 (0.106452%)	
CCGGCTTCTGCTTGAAAAGGGGGGGGGGGGGGGGGGGGG	17 (0.000426%)	
CCGTCGTCGGCTTGAAAAGGGGGGGGGGGGGGGGGGGGG	5 (0.000125%)	
CCGTCTTCGGCGTGAAAATGGGGGGGGGGGGGGGGGGGG	5 (0.000125%)	
CCGTCTTCGGCTTGTAAAGGGGGGGGGGGGGGGGGGGGG	19 (0.000476%)	
CCGTCTTCTGCGTGAAAAAGGGGGGGGGGGGGGGGGGGG	62 (0.001554%)	
CGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	7177 (0.071937%)	
CGTATGCCGGCTTCGGCTTGAAAAGGGGGGGGGGGGGGG	271 (0.006791%)	
CGTATGCCGGCTTCTGCTTGAAAAGGGGGGGGGGGGGGG	1309 (0.032801%)	
CGTATGCCGTCTTCGGCGTGAAAATGGGGGGGGGGGGGG	146 (0.003658%)	
CGTATGCCGTCTTCGGCTTGTAAAGGGGGGGGGGGGGGG	826 (0.020698%)	
CGTATGCCGTCTTCTGCGTGAAAAAGGGGGGGGGGGGGG	2186 (0.054777%)	
CGTCTTCTGCGTGAAAAAGGGGGGGGGGGGGGGGGGGGG	15 (0.000376%)	
CTCACACACACACACACACACACACACACACACACACA	3831 (0.038399%)	
стстстстстстстстстстстстстстстст	1826 (0.018303%)	
GA	3315 (0.033227%)	
GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	110 (0.002756%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCGGCTTGAAAAGGGG GGGGGGGGGG	2178 (0.081319%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCTGCGTGAAAAGGGG GGGGGGGGGG	3342 (0.124779%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCTGCTTGAAAAAGGG GGGGGGGGGG	4046 (0.151064%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCTGCTTGAAAAGGGG GGGGGGGGGG	20400 (0.761669%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCTGCTTGAAAATGGG GGGGGGGGGG	4395 (0.164095%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCGCGTATGCCGTCTTCTGCTTGTAAAGGGG		

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1358 (0.050703%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCGTCTGCTTGAAAAGGGG GGGGGGGGGG	1482 (0.055333%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCGGCGTGAAAAGGGG GGGGGGGGGG	720 (0.026882%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCGGCTTGAAAAAGGG GGGGGGGGGG	785 (0.029309%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCGGCTTGAAAAGGGG GGGGGGGGGG	5457 (0.203747%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCGGCTTGAAAATGGG GGGGGGGGGG	654 (0.024418%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCGTGAAAAGGGG GGGGGGGGGG	5344 (0.199527%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCGTGAAAATGGG GGGGGGGGGG	1362 (0.050853%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAAAAGGG GGGGGGGGGG	16048 (0.599180%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAAATGG GGGGGGGGGG	600 (0.022402%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAAGGGG GGGGGGGGGG	65048 (2.428679%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAAAGTGG GGGGGGGGGG	1464 (0.054661%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAATGGG GGGGGGGGGG	17040 (0.636218%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGAAAATTGG GGGGGGGGGG	485 (0.018108%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGTAAAGGGG GGGGGGGGGG	4109 (0.153417%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGCTTGTAAATGGG GGGGGGGGGG	1513 (0.056490%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATGCCGTCTTCTGGTTGAAAAGGGG GGGGGGGGGG	274 (0.006866%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTATTCCGTCTTCTGCTTGAAAAAGGG GGGGGGGGGG	435 (0.016241%)	
GATCGGAAGAGCACACGTCTGAACTCCAGTCACCTTGTAATCTCGTTTGCCGTCTTCTGCTTGAAAAGGGG GGGGGGGGGG	607 (0.022663%)	
GCACACACACACACACACACACACACACACACACACACA	6612 (0.066274%)	
GCCGGCTTCTGCTTGAAAAGGGGGGGGGGGGGGGGGGGG	7 (0.000175%)	
GCCGTCGTCGGCTTGAAAAGGGGGGGGGGGGGGGGGGGG	3 (0.000075%)	
GCCGTCTTCGGCTTGTAAAGGGGGGGGGGGGGGGGGGGG	3 (0.000075%)	
GCCGTCTTCTGCGTGAAAAAGGGGGGGGGGGGGGGGGGG	14 (0.000351%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	497564 (4.987224%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1328 (0.033277%)	
GGGGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	5513 (0.055258%)	
GGGGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	540 (0.005413%)	
GGGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	933 (0.009352%)	
GGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	846 (0.008480%)	

GGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1792 (0.017962%)	
GGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	2182 (0.021871%)	
GTATGCCGGCTTCTGCTTGAAAAGGGGGGGGGGGGGGGG	4 (0.000100%)	
GTATGCCGTCTTCTGCGTGAAAAAGGGGGGGGGGGGGGG	11 (0.000276%)	
GTCTTCTGCTTGAAAAGGGGGGGGGGGGGGGGGGGGGGG	1031 (0.025835%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGA	399 (0.003999%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	9972 (0.099952%)	
TACACACACACACACACACACACACACACACACACA	5644 (0.056571%)	
TCACACACACACACACACACACACACACACACACACAC	1864 (0.018683%)	
тстстстстстстстстстстстстстстстс	2540 (0.025459%)	
TGCCGGCTTCGGCTTGAAAAGGGGGGGGGGGGGGGGGGG	5 (0.000125%)	
TGCCGGCTTCTGCTTGAAAAGGGGGGGGGGGGGGGGGGG	25 (0.000626%)	
TGCCGTCGTCGGCTTGAAAAGGGGGGGGGGGGGGGGGGG	13 (0.000326%)	
TGCCGTCTTCGGCGTGAAAATGGGGGGGGGGGGGGGGGG	6 (0.000150%)	
TGCCGTCTTCGGCTTGTAAAGGGGGGGGGGGGGGGGGGG	33 (0.000827%)	
TGCCGTCTTCTGCGTGAAAAAGGGGGGGGGGGGGGGGGG	47 (0.001178%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGAG	406 (0.004069%)	
тстстстстстстстстстстстстстс	10906 (0.109314%)	
тстстстстстстстстстстстстстст	316 (0.003167%)	

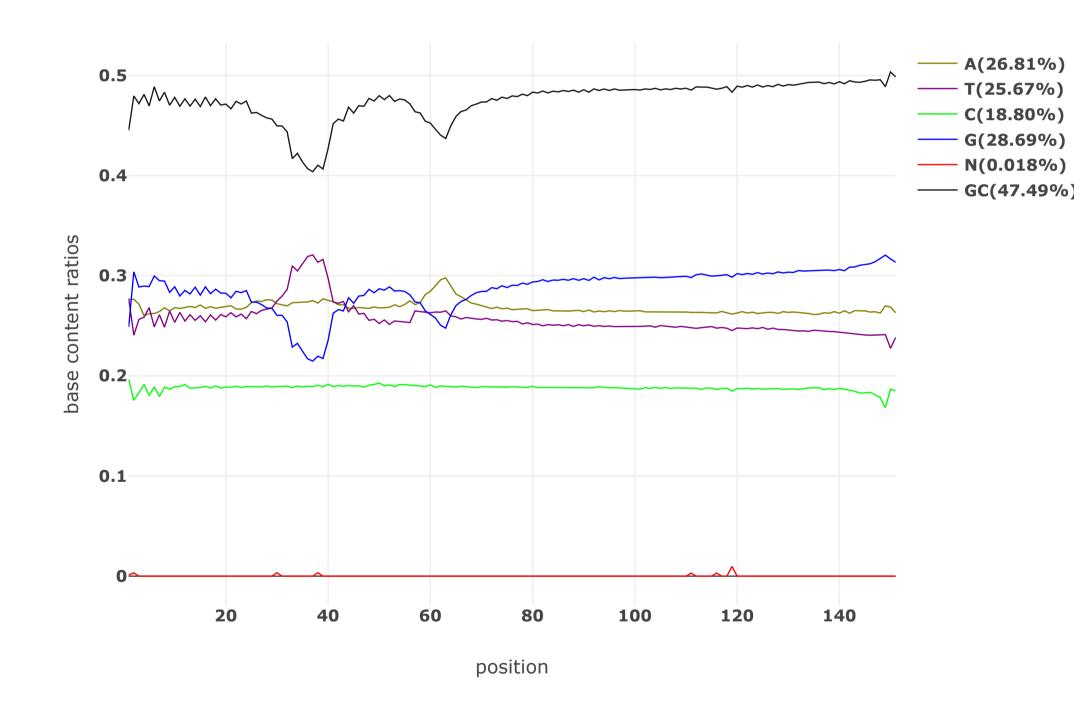
Before filtering: read2: quality





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	AAAA	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	СТСТС	CTCTG	CTCCA	СТССТ	СТССС	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	ССТСТ	ССТСС	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	СССТС	CCCTG	CCCCA	ССССТ	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		GTGAT	GTGAC	GTGAG	GTGTA	GTGTT	GTGTC	GTGTG	GTGCA	GTGCT	GTGCC	GTGCG	GTGGA	GTGGT	GTGGC	GTGGG
	GCAAA							GCATG				GCACG			GCAGC	
GCT	GCTAA	GCTAT	GCTAC	GCTAG	GCTTA		GCTTC	GCTTG	GCTCA	GCTCT			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 151
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	8071 (0.080888%)	
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	659 (0.016511%)	
AACACACACACACACACACACACACACACACACACA	5311 (0.053227%)	
ACACACACACACACACACACACACACACACACAAAC	349 (0.003498%)	
ACACACACACACACACACACACACACACACACACA	409 (0.004099%)	
AC	9150 (0.091702%)	
ACACACACACACACACACACACACACACACACACACAC	61 (0.001528%)	
ACACACACACACACACACACACACACACACACACACACA	303 (0.003037%)	
AG	3483 (0.034907%)	
CACACACACACACACACACACACACACACACAAA	410 (0.004109%)	
CACACACACACACACACACACACACACACACACACA	8787 (0.088064%)	
CACACACACACACACACACACACACACACACACACACA	66 (0.001654%)	
CGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	271 (0.006790%)	
стстстстстстстстстстстстстстст	2000 (0.020044%)	

GA	2975 (0.029816%)	
GCACACACACACACACACACACACACACACACACACACA	5533 (0.055452%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	14 (0.000351%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	27 (0.000676%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	11 (0.000276%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	32 (0.000802%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	20 (0.000501%)	
GGGGGGGGGGAAAGGGGGGGGGGGGGGGGGGGGGGGGG	7 (0.000175%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	15 (0.000376%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	27 (0.000676%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	66 (0.001654%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	12 (0.000301%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	27 (0.000676%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	16 (0.000401%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	23 (0.000576%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1083 (0.027135%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	114 (0.002856%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	34 (0.000852%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	18 (0.000451%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	32 (0.000802%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	19 (0.000476%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	49 (0.001228%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	156 (0.003909%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	936 (0.023452%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	28 (0.000702%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	36 (0.000902%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	20 (0.000501%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	63 (0.001578%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	291 (0.007291%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	52 (0.001303%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	60 (0.001503%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	346 (0.008669%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1118 (0.028012%)	

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG		
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	452 (0.011325%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	53 (0.001328%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	46 (0.001153%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	543 (0.013605%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	60 (0.001503%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	48 (0.001203%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	671 (0.016812%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	98 (0.002455%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	850 (0.021297%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	992 (0.024855%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	113 (0.002831%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	15 (0.000376%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	120 (0.003007%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	25 (0.000626%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	409 (0.010248%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	27 (0.000676%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1010 (0.025306%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	462136 (4.631563%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	7958 (0.199389%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	6919 (0.258302%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1082 (0.027110%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	144 (0.003608%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	359 (0.008995%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	500 (0.012528%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	836 (0.031210%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	381 (0.014224%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	516 (0.019263%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	355 (0.013253%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	220 (0.008213%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	154 (0.005749%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	561 (0.014056%)	

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	84 (0.002105%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	135 (0.005040%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	357 (0.013328%)	
GGGGGGGGGGGGGGGGGGGGGGGGGTTTTTTTT	3723 (0.037312%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	20 (0.000501%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	11 (0.000411%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	7 (0.000175%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	6 (0.000150%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	19 (0.000476%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	34 (0.000852%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	47 (0.001178%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	99 (0.002480%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	3995 (0.100096%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	157 (0.003934%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	571 (0.014307%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1360 (0.034075%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	592 (0.014833%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	374 (0.009371%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	36 (0.000902%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1139 (0.028538%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	216 (0.005412%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	56 (0.001403%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	363 (0.009095%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	46 (0.001153%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	129 (0.003232%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	39 (0.000977%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	224 (0.005612%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	294 (0.007366%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	74 (0.001854%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	314 (0.007867%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	81 (0.002029%)	

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	139 (0.003483%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	39 (0.000977%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	415 (0.010398%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	337 (0.008444%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	420 (0.010523%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1348 (0.033774%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	113 (0.002831%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	265 (0.006640%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	72 (0.001804%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	88 (0.002205%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	34 (0.000852%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	277 (0.006940%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	250 (0.006264%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	276 (0.006915%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	57 (0.001428%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	191 (0.004786%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	80 (0.002004%)	
GGGGGGGGGGGGGTT	60166 (0.301494%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	231 (0.005788%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	71 (0.001779%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	68 (0.001704%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	541 (0.013555%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	32 (0.000802%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	350 (0.008769%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1017 (0.025481%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	305 (0.007642%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	34 (0.000852%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	266 (0.006665%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	488 (0.012227%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	55 (0.001378%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	185 (0.004635%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	64 (0.001604%)	
GGGGGGGGGGGGGTTG	908 (0.004550%)	

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	182 (0.004560%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	52 (0.001303%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	388 (0.009721%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	67 (0.001679%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	104 (0.002606%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1545 (0.038710%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	55 (0.001378%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	155 (0.003884%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	231 (0.005788%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	33 (0.000827%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	214 (0.005362%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	40 (0.001002%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	28 (0.000702%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	140 (0.003508%)	
GGGGGGGGGGGGTGTT	26012 (0.130347%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	53 (0.001328%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	159 (0.003984%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	46 (0.001153%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	15 (0.000376%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	906 (0.022700%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	61 (0.001528%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	66 (0.001654%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1135 (0.028438%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	44 (0.001102%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	118 (0.002957%)	
GGGGGGGGGGGGGTGGGT	25585 (0.128207%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	213 (0.005337%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	25 (0.000626%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	144 (0.003608%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	36 (0.000902%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	22 (0.000551%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	135 (0.003382%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	43 (0.001077%)	

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	109 (0.002731%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	36 (0.000902%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	12 (0.000301%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	35 (0.000877%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	46 (0.001153%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1473 (0.036906%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	51 (0.001278%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	26 (0.000651%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	39 (0.000977%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	98 (0.002455%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1423 (0.035654%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	156 (0.003909%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	22 (0.000551%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	131 (0.003282%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	26 (0.000651%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	26 (0.000651%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	117 (0.002931%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	49 (0.001228%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	98 (0.002455%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	37 (0.000927%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	7 (0.000175%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	29 (0.000727%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	19 (0.000476%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	80 (0.002004%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	55 (0.001378%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	669 (0.016762%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	38 (0.000952%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	78 (0.001954%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	61 (0.001528%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	140 (0.003508%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	14 (0.000351%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	95 (0.002380%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	21 (0.000526%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG		

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	29 (0.000727%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	90 (0.002255%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	33 (0.000827%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	56 (0.001403%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	17 (0.000426%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	7 (0.000175%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	20 (0.000501%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	14 (0.000351%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	33 (0.000827%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	35 (0.000877%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	432 (0.010824%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	21 (0.000526%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	27 (0.000676%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	48 (0.001203%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	102 (0.002556%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	58 (0.001453%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	30 (0.000752%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	22 (0.000551%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	56 (0.001403%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	36 (0.000902%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	37 (0.000927%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	11 (0.000276%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	6 (0.000150%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	13 (0.000326%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	9 (0.000225%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	28 (0.000702%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	27 (0.000676%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	365 (0.009145%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	37 (0.000927%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	58 (0.001453%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	79 (0.001979%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	53 (0.001328%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	26 (0.000651%)	

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	15 (0.000376%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	59 (0.001478%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	16 (0.000401%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	18 (0.000451%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	4 (0.000100%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	8 (0.000200%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	4 (0.000100%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	9 (0.000225%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	11 (0.000276%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	19 (0.000476%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	31 (0.000777%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	42 (0.001052%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	32 (0.000802%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	7 (0.000175%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	25 (0.000626%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	8 (0.000200%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	14 (0.000351%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	3 (0.000075%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	26 (0.000651%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	20 (0.000501%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	40 (0.001002%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	38 (0.000952%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	15 (0.000376%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	9 (0.000225%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	18 (0.000451%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	7 (0.000175%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	17 (0.000426%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	13 (0.000326%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	4 (0.000100%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG		

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	7 (0.000175%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	24 (0.000601%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	611 (0.015309%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	19 (0.000476%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	6 (0.000150%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	28 (0.000702%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	14 (0.000351%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	16 (0.000401%)	
GGGGGGTGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	29 (0.000727%)	
GGGGGGTGTGTGGGGGGGGGGGGGGGGGGGGGGGGGGG	15 (0.000376%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
GGGGGTGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	56 (0.001403%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	56 (0.001403%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	31 (0.000777%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	79 (0.001979%)	
GGGGTGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	45 (0.001127%)	
GGGGTGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	84 (0.002105%)	
GGGGTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	115 (0.002881%)	
GGGGTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	60 (0.001503%)	
GGGTGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	148 (0.003708%)	
GGGTGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	150 (0.003758%)	
GGGTGTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	207 (0.005186%)	
GGGTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	579 (0.014507%)	
GGGTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	70 (0.001754%)	
GGGTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	208 (0.005211%)	
GGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	366 (0.009170%)	
GGTGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	261 (0.006539%)	
GGTGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	433 (0.010849%)	
GGTGTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	144 (0.003608%)	
GGTGTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	598 (0.014983%)	
GGTTGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	488 (0.012227%)	
GGTTGTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	242 (0.006063%)	

GGTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	434 (0.010874%)	
GGTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	952 (0.023853%)	
GGTTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	735 (0.018416%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	4152 (0.104029%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	820 (0.020545%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1609 (0.040314%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	550 (0.013780%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	697 (0.017463%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	9 (0.000225%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	960 (0.024053%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	832 (0.020846%)	
GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1521 (0.038109%)	
GTGGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	680 (0.017038%)	
GTGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	882 (0.022099%)	
GTGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1077 (0.026984%)	
GTGGTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	339 (0.008494%)	
GTGTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	957 (0.023978%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGA	425 (0.004259%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	8806 (0.088254%)	
GTGTGTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	492 (0.012327%)	
GTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	176 (0.004410%)	
GTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	429 (0.010749%)	
GTTGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	519 (0.013004%)	
GTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	967 (0.024228%)	
GTTGTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	391 (0.009797%)	
GTTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	577 (0.014457%)	
GTTTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	618 (0.015484%)	
GTTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	114 (0.002856%)	
GTTTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1272 (0.031870%)	
тстстстстстстстстстстстстстстс	2672 (0.026779%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	949 (0.023777%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	484 (0.012127%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	485 (0.012152%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	448 (0.011225%)	

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG		
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	111 (0.002781%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	698 (0.017489%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	771 (0.019318%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	5 (0.000125%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	653 (0.016361%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	4 (0.000100%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	734 (0.018391%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	544 (0.013630%)	
TGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	909 (0.022775%)	
TGGGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	954 (0.023903%)	
TGGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	8 (0.000200%)	
TGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1446 (0.036230%)	
TGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000251%)	
TGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	355 (0.008895%)	
TGGTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	735 (0.018416%)	
TGGTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	56 (0.001403%)	
TGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	328 (0.008218%)	
TGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1219 (0.030542%)	
TGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	272 (0.006815%)	
TGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	469 (0.011751%)	
TGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	556 (0.013931%)	
TGTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	6 (0.000150%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGAG	462 (0.004630%)	
тстстстстстстстстстстстстстстстс	13843 (0.138736%)	
TGTGTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	290 (0.007266%)	
TGTGTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	447 (0.011200%)	
TGTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	300 (0.007517%)	
TGTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	919 (0.023026%)	
TGTTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	713 (0.017864%)	

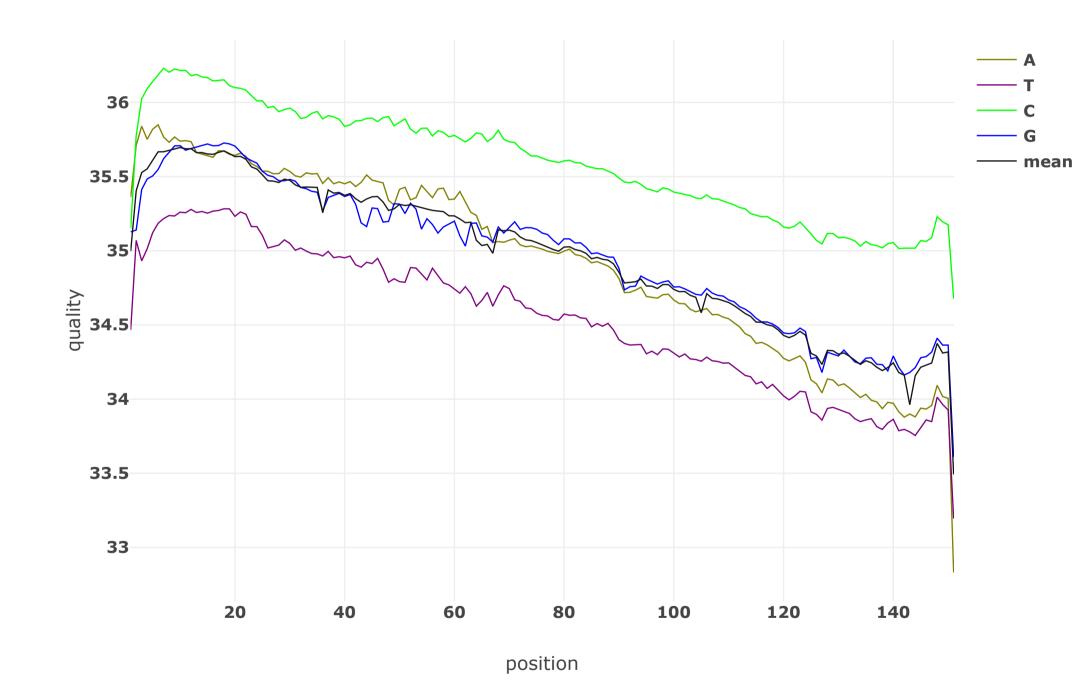
TGTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1149 (0.028788%)	
TTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	165 (0.004134%)	
TTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	228 (0.005713%)	
TTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	741 (0.018566%)	
TTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	435 (0.010899%)	
TTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	194 (0.004861%)	
TTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	567 (0.014206%)	
TTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1108 (0.027761%)	
TTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	414 (0.010373%)	
TTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	326 (0.008168%)	
TTGGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	729 (0.018265%)	
TTGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1492 (0.037382%)	
TTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	6 (0.000150%)	
TTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	434 (0.010874%)	
TTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	536 (0.013430%)	
TTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	533 (0.013354%)	
TTGTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1212 (0.030367%)	
TTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	91 (0.002280%)	
TTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	150 (0.003758%)	
TTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	982 (0.024604%)	
TTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	297 (0.007441%)	
TTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	274 (0.006865%)	
TTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	250 (0.006264%)	
TTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	167 (0.004184%)	
TTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	653 (0.016361%)	
TTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	3 (0.000075%)	
TTTGTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	1237 (0.030993%)	
TTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	49 (0.001228%)	
TTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	124 (0.003107%)	
TTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	727 (0.018215%)	
TTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	219 (0.005487%)	
TTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	154 (0.003859%)	
TTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	431 (0.010799%)	
TTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	575 (0.014407%)	

GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG		
TTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	706 (0.017689%)	
TTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	375 (0.009396%)	
TTTTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	562 (0.014081%)	
TTTTTTGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	939 (0.023527%)	
TTTTTTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	2415 (0.060508%)	

After filtering

After filtering: read1: quality

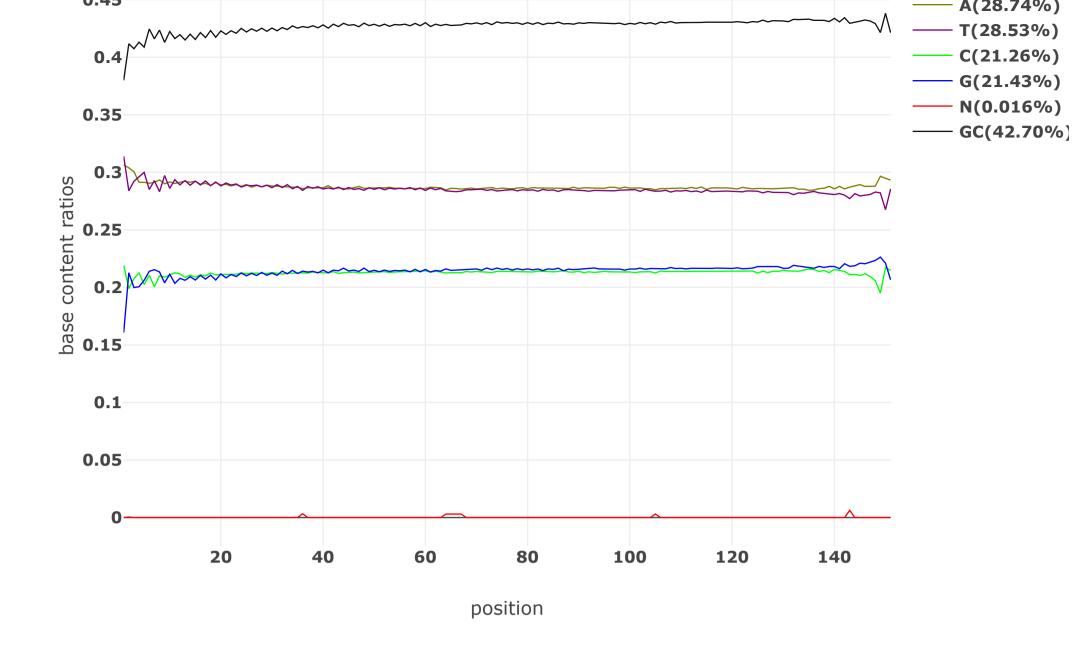
Value of each position will be shown on mouse over.



After filtering: read1: base contents

Value of each position will be shown on mouse over.

0.45



After filtering: read1: KMER counting

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

Dair		kgi oullu		targer	Counts	. The C	W1		illowii oi		over.					
	AA	AT	AC	AG	TA	TT	TC	TG	CA	СТ	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	СТТСТ	CTTCC	CTTCG	CTTGA	CTTGT	CTTGC	CTTGG
CTC	CTCAA	CTCAT	CTCAC	CTCAG	СТСТА	СТСТТ	СТСТС	CTCTG	CTCCA	СТССТ	СТССС	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		CCTAT	CCTAC	CCTAG	CCTTA	CCTTT	CCTTC	CCTTG	CCTCA	ССТСТ	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	$GGG\Delta\Delta$	GGGAT	$GGG\DeltaC$	GGGAG	$GGGT\Delta$	GGGTT	GGGTC	GGGTG	$GGGC\Delta$	GGGCT	GGGCC	GGGCG	$GGGG\Delta$	GGGGT	GGGGC	GGGGG

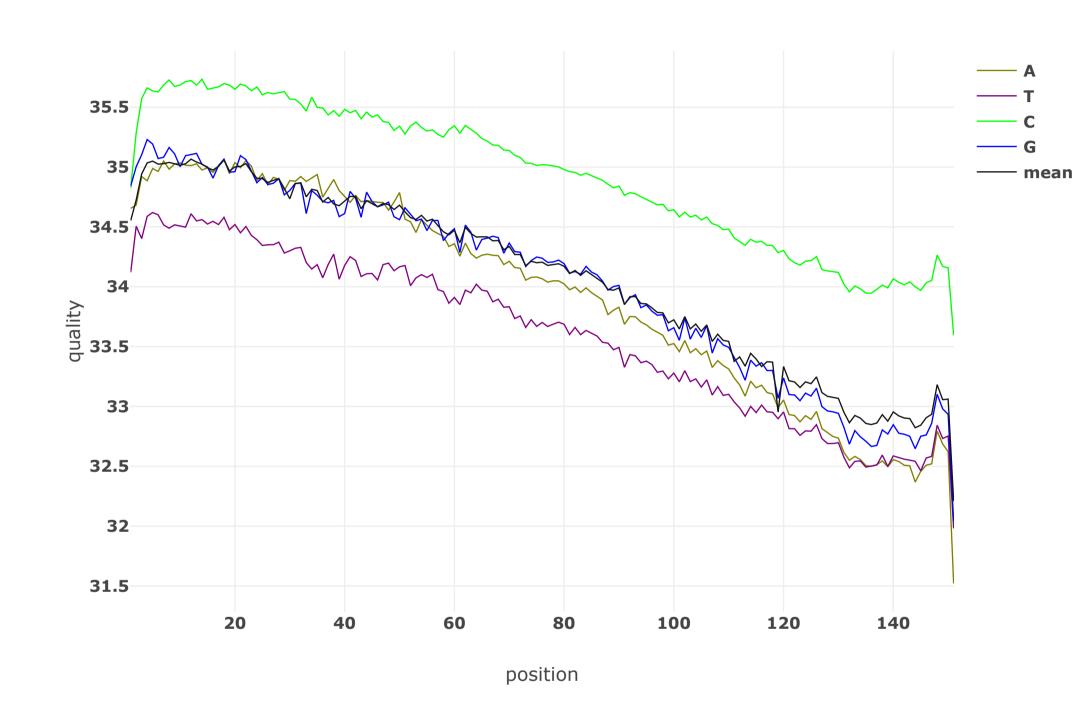
After filtering: read1: overrepresented sequences

overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 151
АААААААА	22602 (0.075125%)	
AACACACACACACACACACACACACACACACACA	4380 (0.058233%)	
ACACACACACACACACACACACACACACACACACA	124 (0.001649%)	
AC	4142 (0.055069%)	
ACACACACACACACACACACACACACACACACACACA	110 (0.001462%)	
AG	3023 (0.040192%)	
AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	129 (0.004288%)	
ATGTGTGTGTGTGTGTGTGTGTGTGTGTGT	4082 (0.054271%)	
CACACACACACACACACACACACACACACAAA	188 (0.002500%)	
CACACACACACACACACACACACACACACACACA	3287 (0.043701%)	
CACACACACACACACACACACACACACACAGA	149 (0.001981%)	
CACACACACACACACT	14688 (0.097640%)	
CGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	6 (0.000080%)	
CTCACACACACACACACACACACACACACACACACA	2924 (0.038875%)	
стстстстстстстстстстстстстстстст	1246 (0.016566%)	
GA	2722 (0.036190%)	
GAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	107 (0.003556%)	
GCACACACACACACACACACACACACACACACACACACA	4785 (0.063618%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	14 (0.000186%)	
GGGGGGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	10 (0.000133%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGA	232 (0.003084%)	
<u> GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG</u>	7582 (0.100805%)	
TACACACACACACACACACACACACACACACACA	4117 (0.054737%)	
TCACACACACACACACACACACACACACACACACACACA	1323 (0.017590%)	
тстстстстстстстстстстстстстстстс	1732 (0.023027%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGAG	219 (0.002912%)	

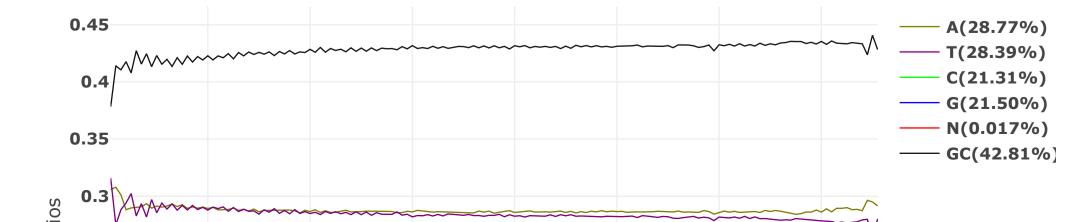
TG	8245 (0.109619%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTTGTT	212 (0.002819%)	

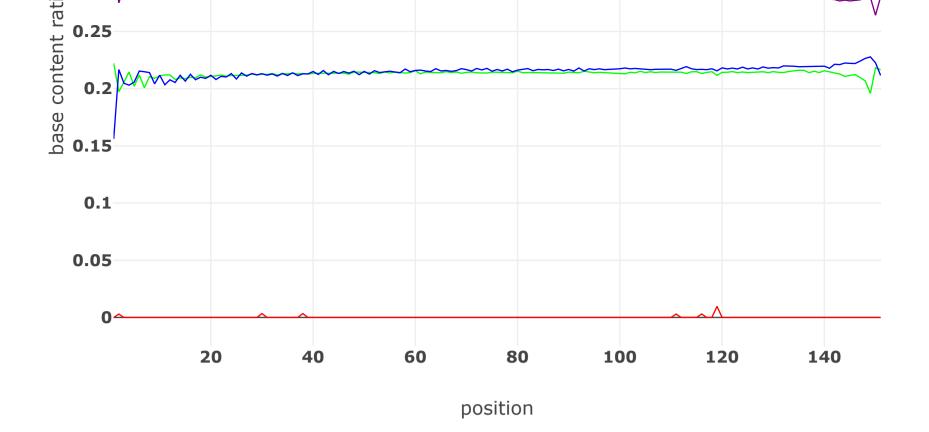
After filtering: read2: quality

Value of each position will be shown on mouse over.



After filtering: read2: base contents





After filtering: read2: KMER counting

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

	_							.ll be s								
AA		AT	AC	AG	TA	TT	TC	TG	CA	CT	CC	CG	GA	GT	GC	GG
A AAAAT		AAAAT AATAT	AAAAC AATAC	AAAAG AATAG	AAATA AATTA	AAATT AATTT	AAATC AATTC	AAATG AATTG	AAACA AATCA	AAACT AATCT	AAACC AATCC	AAACG AATCG	AAAGA AATGA	AAAGT AATGT	AAAGC AATGC	AAAG AATG
C AACA		AACAT	AACAC	AACAG	AACTA	AACTT	AACTC	AACTG	AACCA	AACCT	AACCC	AACCG	AACGA	AACGT	AACGC	AACG
AAGA		AAGAT	AAGAC	AAGAG	AAGTA	AAGTT	AAGTC	AAGTG	AAGCA	AAGCT	AAGCC	AAGCG	AAGGA	AAGGT	AAGGC	AAGO
ATA		ATAAT	ATAAC	ATAAG	ATATA	ATATT	ATATC	ATATG	ATACA	ATACT	ATACC	ATACG	ATAGA	ATAGT	ATAGC	ATA
ATTA		ATTAT	ATTAC	ATTAG	ATTTA	ATTTT	ATTTC	ATTTG	ATTCA	ATTCT	ATTCC	ATTCG	ATTGA	ATTGT	ATTGC	ATTO
ATC		ATCAT	ATCAC	ATCAG	ATCTA	ATCTT	ATCTC	ATCTG	ATCCA	ATCCT	ATCCC	ATCCG	ATCGA	ATCGT	ATCGC	ATC
ATCA ATGA		ATGAT	ATGAC	ATGAG	ATGTA	ATGTT	ATGTC	ATGTG	ATGCA	ATGCT	ATGCC	ATGCG	ATGGA	ATGGT	ATGGC	ATG
ACAA		ACAAT	ACAAC	ACAAG	ACATA	ACATT	ACATC	ACATG	ACACA	ACACT	ACACC	ACACG	ACAGA	ACAGT	ACAGC	ACA
ACTA	AA	ACTAT	ACTAC	ACTAG	ACTTA	ACTTT	ACTTC	ACTTG	ACTCA	ACTCT	ACTCC	ACTCG	ACTGA	ACTGT	ACTGC	ACTO
ACCA	AA	ACCAT	ACCAC	ACCAG	ACCTA	ACCTT	ACCTC	ACCTG	ACCCA	ACCCT	ACCCC	ACCCG	ACCGA	ACCGT	ACCGC	ACC
ACGA	AA	ACGAT	ACGAC	ACGAG	ACGTA	ACGTT	ACGTC	ACGTG	ACGCA	ACGCT	ACGCC	ACGCG	ACGGA	ACGGT	ACGGC	ACG
AGA	AA	AGAAT	AGAAC	AGAAG	AGATA	AGATT	AGATC	AGATG	AGACA	AGACT	AGACC	AGACG	AGAGA	AGAGT	AGAGC	AGA
AGT	AA	AGTAT	AGTAC	AGTAG	AGTTA	AGTTT	AGTTC	AGTTG	AGTCA	AGTCT	AGTCC	AGTCG	AGTGA	AGTGT	AGTGC	AGT
AGC	AA	AGCAT	AGCAC	AGCAG	AGCTA	AGCTT	AGCTC	AGCTG	AGCCA	AGCCT	AGCCC	AGCCG	AGCGA	AGCGT	AGCGC	AGC
AGGA	AA	AGGAT	AGGAC	AGGAG	AGGTA	AGGTT	AGGTC	AGGTG	AGGCA	AGGCT	AGGCC	AGGCG	AGGGA	AGGGT	AGGGC	AGG
TAAA		TAAAT	TAAAC	TAAAG	TAATA	TAATT	TAATC	TAATG	TAACA	TAACT	TAACC	TAACG	TAAGA	TAAGT	TAAGC	TAA
TATA	AA	TATAT	TATAC	TATAG	TATTA	TATTT	TATTC	TATTG	TATCA	TATCT	TATCC	TATCG	TATGA	TATGT	TATGC	TAT
TAC		TACAT	TACAC	TACAG	TACTA	TACTT	TACTC	TACTG	TACCA	TACCT	TACCC	TACCG	TACGA	TACGT	TACGC	TAC
TAGA		TAGAT	TAGAC	TAGAG	TAGTA	TAGTT	TAGTC	TAGTG	TAGCA	TAGCT	TAGCC	TAGCG	TAGGA	TAGGT	TAGGC	TAG
TTA		TTAAT	TTAAC	TTAAG	TTATA	TTATT	TTATC	TTATG	TTACA	TTACT	TTACC	TTACG	TTAGA	TTAGT	TTAGC	TTA
TTT		TTTAT	TTTAC	TTTAG	TTTTA	TTTTT	TTTTC	TTTTG	TTTCA	TTTCT	TTTCC	TTTCG	TTTGA	TTTGT	TTTGC	TTT
TTC		TTCAT	TTCAC	TTCAG	TTCTA	TTCTT	TTCTC	TTCTG	TTCCA	TTCCT	TTCCC	TTCCG	TTCGA	TTCGT	TTCGC	TTC
TTGA		TTGAT	TTGAC	TTGAG	TTGTA	TTGTT	TTGTC	TTGTG	TTGCA	TTGCT	TTGCC	TTGCG	TTGGA	TTGGT	TTGGC	TTG
TCA		TCAAT	TCAAC	TCAAG	TCATA	TCATT	TCATC	TCATG	TCACA	TCACT	TCACC	TCACG	TCAGA	TCAGT	TCAGC	TCA
TCTA		TCTAT	TCTAC	TCTAG	TCTTA	TCTTT	TCTTC	TCTTG	TCTCA	ТСТСТ	TCTCC	TCTCG	TCTGA	TCTGT	TCTGC	ТСТ
TCCA		TCCAT	TCCAC	TCCAG	TCCTA	TCCTT	TCCTC	TCCTG	TCCCA	TCCCT	TCCCC	TCCCG	TCCGA	TCCGT	TCCGC	TCC
TCG/ TGA/		TCGAT	TCGAC	TCGAG	TCGTA	TCGTT	TCGTC	TCGTG	TCGCA	TCGCT	TCGCC	TCGCG	TCGGA	TCGGT	TCGGC	TCG
TGA		TGAAT	TGAAC	TGAAG	TGATA	TGATT	TGATC	TGATG	TGACA	TGACT	TGACC	TGACG	TGAGA	TGAGT	TGAGC	TGA
TGTA		TGTAT	TGTAC	TGTAG	TGTTA	TGTTT	TGTTC	TGTTG	TGTCA	TGTCT	TGTCC	TGTCG	TGTGA	TGTGT	TGTGC	TGT
TGCA		TGCAT	TGCAC	TGCAG	TGCTA	TGCTT	TGCTC	TGCTG	TGCCA	TGCCT	TGCCC	TGCCG	TGCGA	TGCGT	TGCGC	TGC
TGGA		TGGAT	TGGAC	TGGAG	TGGTA	TGGTT	TGGTC	TGGTG	TGGCA	TGGCT	TGGCC	TGGCG	TGGGA	TGGGT	TGGGC	TGG
CAAA		CAAAT	CAAAC	CAAAG	CAATA	CATTT	CAATC	CAATG	CAACA	CAACT	CAACC	CAACG	CAAGA	CAAGT	CAAGC	CAA
CATA		CACAT	CATAC	CATAG	CATTA	CATTT	CATTC	CATTG	CATCA	CATCT	CATCC	CATCG	CATGA	CATGT	CATGC	CAT
CACA		CACAT	CACAC	CACAG	CACTA	CACTT	CACTC	CACTG	CACCA CAGCA	CACCT	CACCC	CACCG	CACGA	CACGT	CACGC	CAC
CAGA		CAGAT	CAGAC	CAGAG	CAGTA	CAGTT	CAGTC	CAGTG		CAGCT	CAGCC	CAGCG	CAGGA	CAGGT	CAGGC	CAG
CTA		CTAAT	CTAAC	CTAAG	CTATA	CTATT	CTATC	CTATG	CTACA	CTACT	CTACC	CTACG	CTAGA	CTAGT	CTAGC	CTA
CTT/		CTCAT	CTCAC	CTCAG	CTCTA	CTTTT	CTCTC	CTTTG	CTCCA	CTTCT	CTTCC	CTTCG CTCCG	CTTGA	CTTGT CTCGT	CTTGC CTCGC	CTT CTC
CTC#		CTCAT CTGAT	CTCAC CTGAC	CTCAG CTGAG	CTCTA CTGTA	CTCTT CTGTT	CTCTC CTGTC	CTCTG CTGTG	CTCCA CTGCA	CTCCT CTGCT	CTCCC CTGCC	CTGCG	CTCGA CTGGA	CTGGT	CTGGC	CTG
		CCAAT	CCAAC	CCAAG	CCATA	CCATT	CCATC	CCATG	CCACA	CCACT	CCACC	CCACG	CCAGA	CCAGT	CCAGC	CCA
CCA		CCTAT	CCTAC	CCTAG	CCTTA	CCTTT	CCTTC	CCTTG	CCTCA	CCTCT	CCTCC	CCTCG	CCTGA	CCTGT	CCTGC	CCT
CCCA				CCCAG										CCCGT		
CCGA		CCGAT	CCGAC	CCGAG	CCGTA	CCGTT	CCGTC			CCGCT		CCGCG	CCGGA	CCGGT	CCGGC	
CGA		CGAAT	CGAAC	CGAAG	CGATA	CGATT	CGATC	CGATG	CGACA	CGACT	CGACC	CGACG	CGAGA	CGAGT	CGAGC	CGA
CGTA		CGTAT	CGTAC	CGTAG	CGTTA	CGTTT	CGTTC		CGTCA	CGTCT	CGTCC	CGTCG	CGTGA	CGTGT	CGTGC	CGT
CGCA		CGCAT	CGCAC	CGCAG	CGCTA	CGCTT	CGCTC	CGCTG	CGCCA	CGCCT	CGCCC	CGCCG	CGCGA	CGCGT	CGCGC	CGC
CGGA		CGGAT	CGGAC	CGGAG	CGGTA	CGGTT	CGGTC	CGGTG	CGGCA	CGGCT	CGGCC	CGGCG	CGGGA	CGGGT	CGGGC	CGG
GAAA		GAAAT	GAAAC	GAAAG	GAATA	GAATT	GAATC	GAATG	GAACA	GAACT	GAACC	GAACG	GAAGA	GAAGT	GAAGC	GAA
GATA		GATAT	GATAC	GATAG	GATTA	GATTT	GATTC	GATTG	GATCA	GATCT	GATCC	GATCG	GATGA	GATGT	GATGC	GAT
GACA		GACAT	GACAC	GACAG	GACTA	GACTT	GACTC	GACTG	GACCA	GACCT	GACCC	GACCG	GACGA	GACGT	GACGC	GAC
GAGA		GAGAT	GAGAC	GAGAG	GAGTA	GAGTT	GAGTC	GAGTG	GAGCA	GAGCT	GAGCC	GAGCG	GAGGA	GAGGT	GAGGC	GAG
GTA		GTAAT	GTAAC	GTAAG	GTATA	GTATT	GTATC	GTATG	GTACA	GTACT	GTACC	GTACG	GTAGA	GTAGT	GTAGC	GTA
GTT		GTTAT	GTTAC	GTTAG	GTTTA	GTTTT	GTTTC	GTTTG	GTTCA	GTTCT	GTTCC	GTTCG	GTTGA	GTTGT	GTTGC	GTT
GTC		GTCAT	GTCAC	GTCAG	GTCTA	GTCTT	GTCTC		GTCCA	GTCCT	GTCCC	GTCCG	GTCGA	GTCGT	GTCGC	GTC
GTGA	AA	GTGAT	GTGAC	GTGAG	GTGTA	GTGTT	GTGTC	GTGTG	GTGCA	GTGCT	GTGCC	GTGCG	GTGGA	GTGGT	GTGGC	GTG
GCA		GCAAT	GCAAC	GCAAG	GCATA	GCATT	GCATC	GCATG	GCACA	GCACT	GCACC	GCACG	GCAGA	GCAGT	GCAGC	GCA
GCTA		GCTAT	GCTAC	GCTAG	GCTTA	GCTTT	GCTTC	GCTTG	GCTCA	GCTCT	GCTCC	GCTCG	GCTGA	GCTGT	GCTGC	GCT
GCCA	AA	GCCAT	GCCAC	GCCAG	GCCTA	GCCTT	GCCTC	GCCTG	GCCCA	GCCCT	GCCCC	GCCCG	GCCGA	GCCGT	GCCGC	GCC
GCGA		GCGAT	GCGAC	GCGAG	GCGTA	GCGTT	GCGTC	GCGTG	GCGCA	GCGCT	GCGCC	GCGCG	GCGGA	GCGGT	GCGGC	GCG
GGA	AA	GGAAT	GGAAC	GGAAG	GGATA	GGATT	GGATC	GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGA
GGT	AA	GGTAT	GGTAC	GGTAG	GGTTA	GGTTT	GGTTC	GGTTG	GGTCA	GGTCT	GGTCC	GGTCG	GGTGA	GGTGT	GGTGC	GGT
GGCA	AA	GGCAT	GGCAC	GGCAG	GGCTA	GGCTT	GGCTC	GGCTG	GGCCA	GGCCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGC

<mark>GGG | GGGAA | GGGAT | GGGAC | GGGAG | GGGTA | GGGTT | GGGTC | GGGTG | GGGCA | GGGCT | GGGCC | GGGGA | GGGGT | GGGGC | GGGG</mark>

After filtering: read2: overrepresented sequences

Sampling rate: 1 / 20

overrepresented sequence	count (% of bases)	distribution: cycle 1 \sim cycle 151
ААААААААААААААААААААААААААААА	40 (0.000532%)	
AACACACACACACACACACACACACACACACACACA	4258 (0.056638%)	
ACACACACACACACACACACACACACACAAAC	256 (0.003405%)	
ACACACACACACACACACACACACACACACACA	243 (0.003232%)	
AC	7095 (0.094374%)	
ACACACACACACACACACACACACACACACACACACAC	70 (0.002328%)	
AC	197 (0.002620%)	
AG	2569 (0.034172%)	
CACACACACACACACACACACACACACACACACAA	295 (0.003924%)	
CACACACACACACACACACACACACACACACACACACA	6606 (0.087870%)	
CACACACACACACACACACACACACACACACACACACA	78 (0.002594%)	
стстстстстстстстстстстстстстст	1622 (0.021575%)	
GA	2264 (0.030115%)	
GCACACACACACACACACACACACACACACACACACACA	4432 (0.058952%)	
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	22 (0.000293%)	
GGGGGGGGGGGGGGTGGGT	16 (0.000106%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGA	261 (0.003472%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	6427 (0.085489%)	
тстстстстстстстстстстстстстстс	2011 (0.026749%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGAG	293 (0.003897%)	
тстстстстстстстстстстстстстстс	10154 (0.135063%)	

fastp -i /work/frr6/SHAD/NXTRIM/MP10k_R1.unknown.fastq.gz -I /work/frr6/SHAD/NXTRIM/MP10k_R2.unknown.fastq.gz -o MP10k_unk_F.trimmed.fq.gz -0 MP10k_unk_R.trimmed.fq.gz --detect_adapter_for_pe --cut_front --cut_tail --cut_window_size=4 --cut_mean_quality=20 --qualified_quality_phred=20 --unqualified_percent_limit=30 --n_base_limit=5 --length_required=50 --low_complexity_filter --complexity_threshold=30 --overrepresentation_analysis --json=MP10k_unk.json --html=MP10k_unk.html --report_title=MP10k_unk --thread=8

fastp 0.19.6, at 2019-01-18 11:14:03