MP5k_pe

Summary

General

fastp version:	0.19.6 (https://github.com/OpenGene/fastp)
sequencing:	paired end (151 cycles + 151 cycles)
mean length before filtering:	120bp, 122bp
mean length after filtering:	118bp, 117bp
duplication rate:	58.479095%
Insert size peak:	151

Before filtering

total reads:	175.694052 M
total bases:	21.363063 G
Q20 bases:	19.967342 G (93.466662%)
Q30 bases:	18.329480 G (85.799871%)
GC content:	43.095624%

After filtering

total reads:	159.210166 M
total bases:	18.727026 G
Q20 bases:	17.835277 G (95.238169%)
Q30 bases:	16.480675 G (88.004763%)
GC content:	42.879918%

Filtering result

reads passed filters:	159.210166 M (90.617846%)
reads with low quality:	12.503538 M (7.116654%)
reads with too many N:	1.382000 K (0.000787%)
reads too short:	3.777180 M (2.149862%)
reads with low complexity:	201.786000 K (0.114851%)

Adapters

Adapter or bad ligation of read1

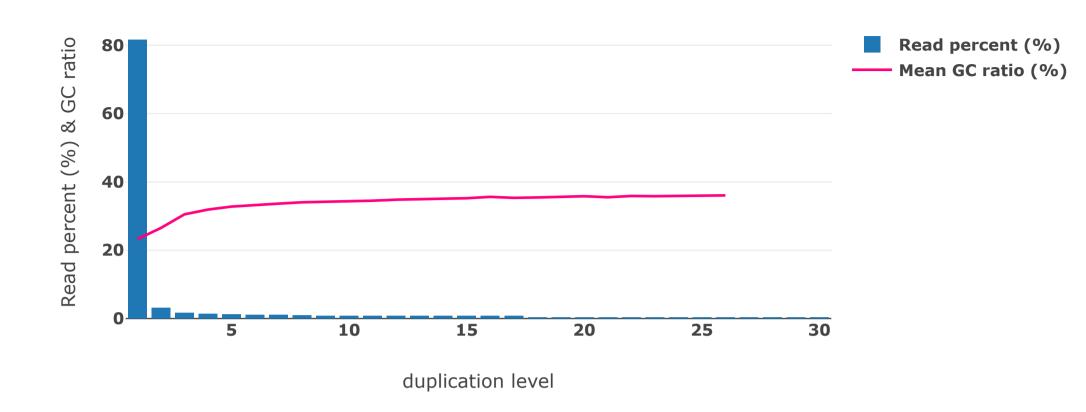
Sequence	Occurrences				
all adapter sequences	7412425				

Adapter or bad ligation of read2

Sequence	Occurrences
all adapter sequences	8443437

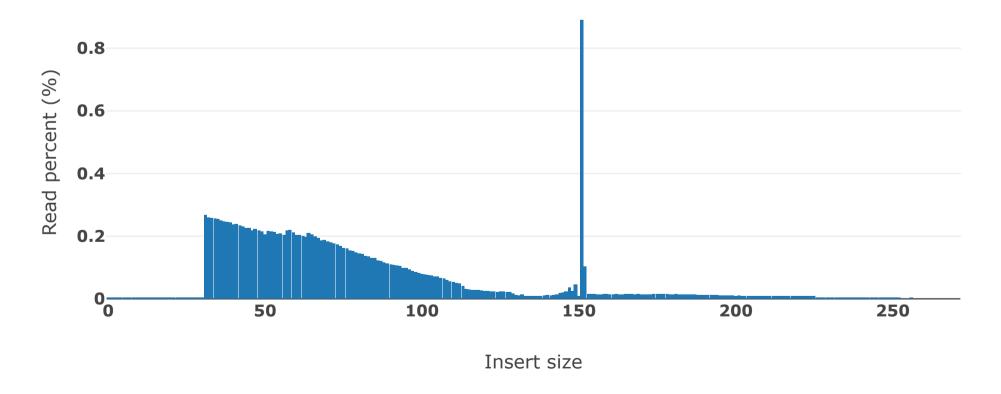
Duplication

duplication rate (58.479095%)



Insert size estimation

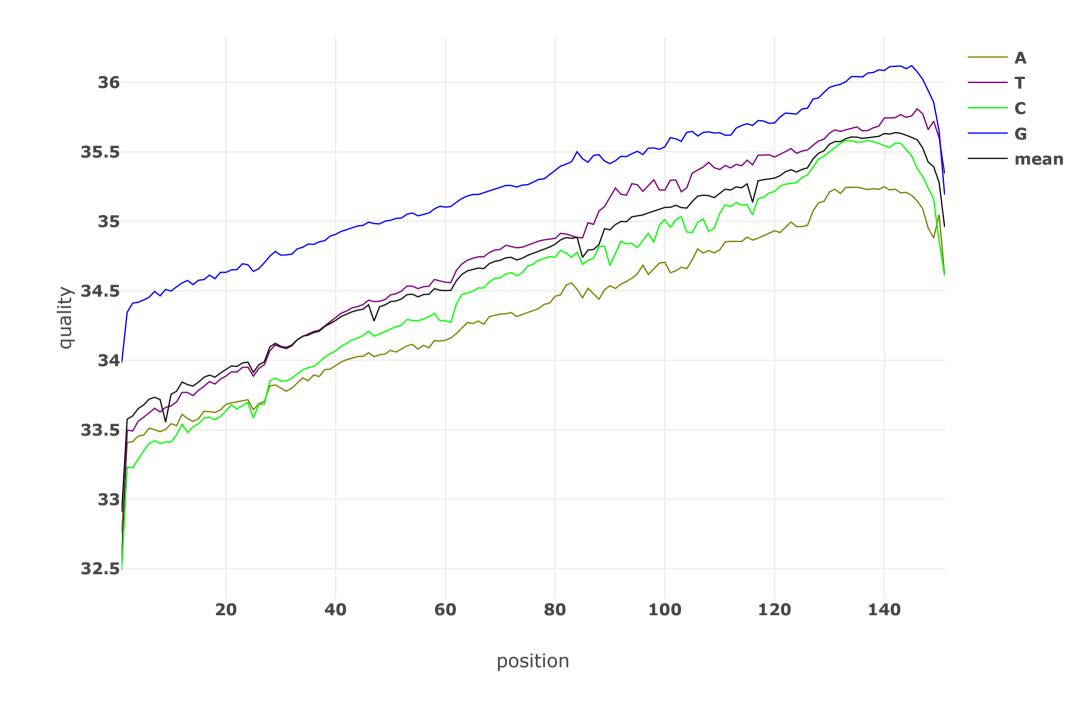
Insert size distribution (83.949054% reads are with unknown length)



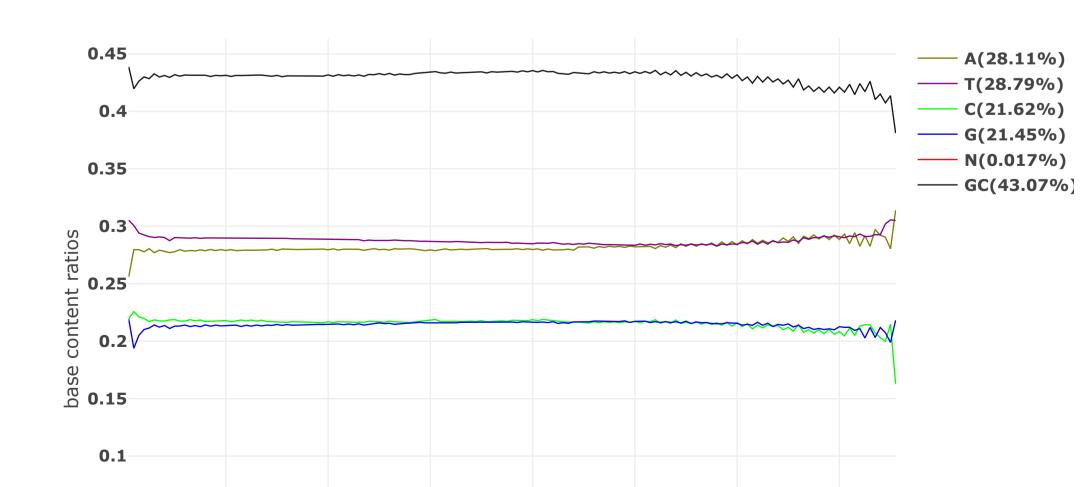
This estimation is based on paired—end overlap analysis, and there are 83.949054% reads found not overlapped. The nonoverlapped read pairs may have insert size <30 or >272, or contain too much sequencing errors to be detected as overlapped.

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.

	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 ATAAA	AAGAT ATAAT	AAGAC ATAAC	AAGAG ATAAG	AAGTA ATATA	AAGTT ATATT	AAGTC ATATC	AAGTG ATATG	AAGCA ATACA	AAGCT ATACT	AAGCC ATACC	AAGCG ATACG	AAGGA ATAGA	AAGGT ATAGT	AAGGC ATAGC	AAGGG ATAGG
ATT	ATAAA	ATTAT	ATTAC	ATAAG	ATTTA	ATTTT	ATTTC	ATTTG	ATTCA	ATACT	ATACC	ATACG	ATAGA	ATTGT	ATAGC	ATAGG
ATC	ATCAA	ATCAT	ATCAC	ATCAG	ATCTA	ATCTT	ATCTC	ATCTG	ATCCA	ATCCT	ATCCC	ATTCG	ATCGA	ATCGT	ATCGC	ATTCG
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 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	AGCGC AGGGC	AGCGG 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 TCCAA	TCTAT TCCAT	TCTAC TCCAC	TCTAG TCCAG	TCTTA TCCTA	TCTTT TCCTT	ТСТТС ТССТС	TCTTG TCCTG	TCTCA TCCCA	TCTCT TCCCT	TCTCC TCCCC	TCTCG TCCCG	TCTGA TCCGA	TCTGT TCCGT	TCTGC TCCGC	TCTGG 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	CACTT	CACTC	CACTG	CATCA	CATCT	CATCC	CATCG	CATGA	CATGT	CATGC	CATGG
CAC	CACAA CAGAA	CACAT CAGAT	CACAC CAGAC	CACAG CAGAG	CACTA CAGTA	CACTT CAGTT	CACTC CAGTC	CACTG CAGTG	CACCA CAGCA	CACCT CAGCT	CACCC CAGCC	CACCG CAGCG	CACGA CAGGA	CACGT CAGGT	CACGC CAGGC	CACGG 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	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	CCTCC	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	CCCTC	CCCTG	CCCCA	CCCCT	CCCCC	CCCCG	CCCGA	CCCGT	CCCGC	CCCGG
									CCGCA					CCGGT		
CGA	CGAAA CGTAA	CGAAT CGTAT	CGAAC CGTAC	CGAAG CGTAG	CGATA CGTTA	CGATT CGTTT	CGATC CGTTC	CGATG CGTTG	CGACA CGTCA	CGACT CGTCT	CGACC CGTCC	CGACG CGTCG	CGAGA CGTGA	CGAGT CGTGT	CGAGC CGTGC	CGAGG 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 GTCAT	GTTAC	GTTAG GTCAG	GTTTA	GTTTT	GTTTC	GTTTG	GTTCA	GTTCT	GTTCC	GTTCG	GTTGA	GTTGT GTCGT	GTTGC GTCGC	GTTGG
GTC	GTCAA GTGAA	GTGAT	GTCAC GTGAC	GTGAG	GTCTA GTGTA	GTCTT GTGTT	GTCTC GTGTC	GTCTG GTGTG	GTCCA GTGCA	GTCCT GTGCT	GTCCC GTGCC	GTCCG GTGCG	GTCGA GTGGA	GTGGT	GTGGC	GTCGG 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

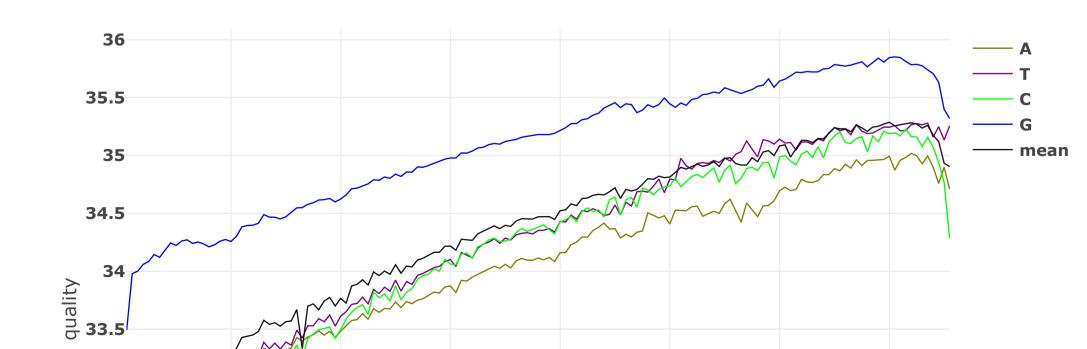
Before filtering: read1: overrepresented sequences

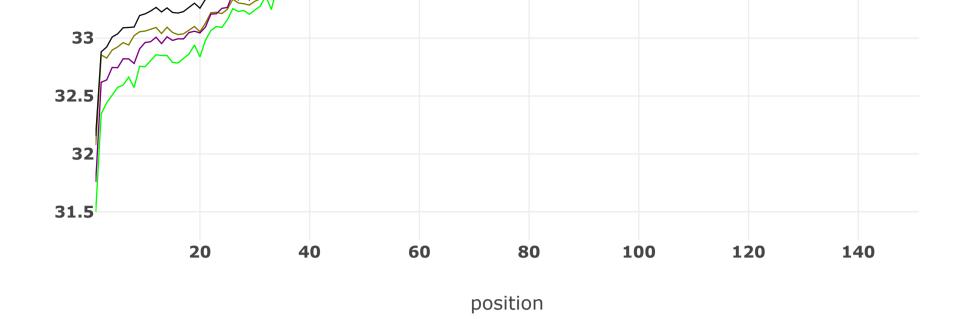
Sampling rate: 1 / 20

overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 151				
AACACACACACACACACACACACACACACACACACACACA	7308 (0.055049%)					
ACACACACACACACACACACACACACACACACACA	242 (0.001823%)					
AC	11223 (0.084540%)					

AC	325 (0.002448%)	
AG	2774 (0.020896%)	
CACACACACACACACACACACACACACACACACACACA	10293 (0.077534%)	
ccccccccccccccccccccccccccccccccccccccc	5021 (0.037822%)	
CTCACACACACACACACACACACACACACACACACA	7127 (0.053686%)	
стстстстстстстстстстстстстстст	4612 (0.034741%)	
CT	86 (0.001620%)	
CTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	8662 (0.065249%)	
GA	3229 (0.024323%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTG	423 (0.003186%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	17212 (0.129653%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	62 (0.001168%)	
TCACACACACACACACACACACACACACACACACACACA	2680 (0.020188%)	
тстстстстстстстстстстстстстстстс	5776 (0.043509%)	
TC	148 (0.002787%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTA	231 (0.001740%)	
тдтдтдтдтдтдтдтдтдтдтдтдтдтдтдтд	7713 (0.058100%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	108 (0.002034%)	
TTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	3651 (0.027502%)	
TTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	10061 (0.075787%)	
тттттттт	42358 (0.079768%)	

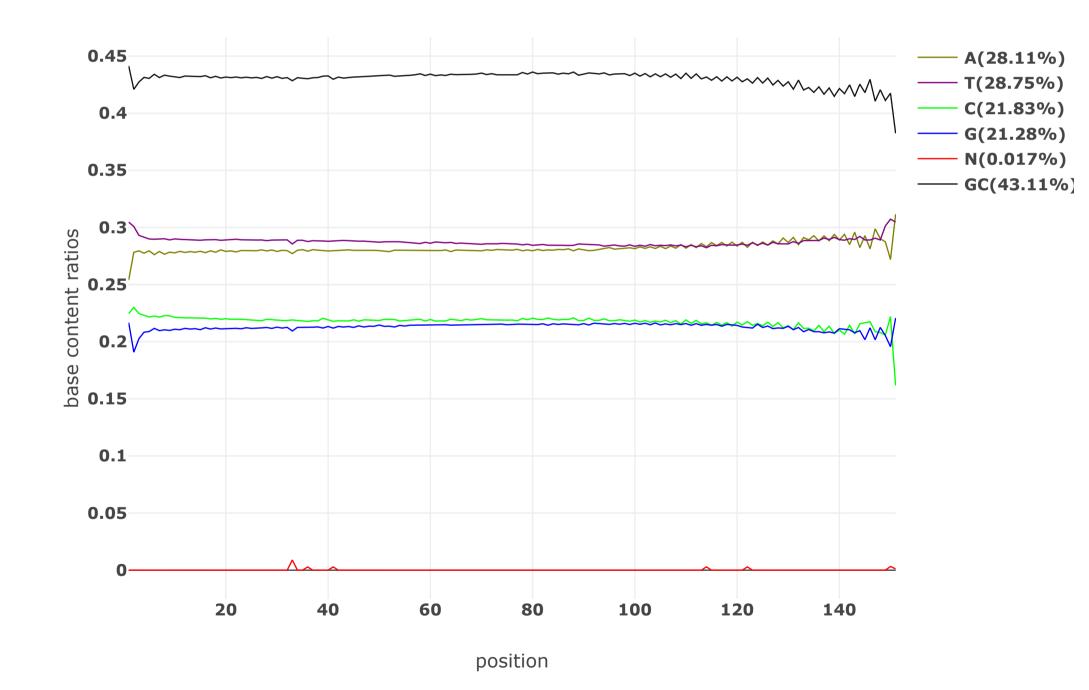
Before filtering: read2: quality





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
AA	A AAAA	AAAAT	AAAAC	AAAAG	AAATA	AAATT	AAATC	AAATG	AAACA	AAACT	AAACC	AAACG	AAAGA	AAAGT	AAAGC	AAAGG
AA	T AATAA	AATAT	AATAC	AATAG	AATTA	AATTT	AATTC	AATTG	AATCA	AATCT	AATCC	AATCG	AATGA	AATGT	AATGC	AATGG
AA	C AACAA	AACAT	AACAC	AACAG	AACTA	AACTT	AACTC	AACTG	AACCA	AACCT	AACCC	AACCG	AACGA	AACGT	AACGC	AACGG
AA	G AAGAA	AAGAT	AAGAC	AAGAG	AAGTA	AAGTT	AAGTC	AAGTG	AAGCA	AAGCT	AAGCC	AAGCG	AAGGA	AAGGT	AAGGC	AAGGG
AT	A ATAAA	ATAAT	ATAAC	ATAAG	ATATA	ATATT	ATATC	ATATG	ATACA	ATACT	ATACC	ATACG	ATAGA	ATAGT	ATAGC	ATAGG
AT	T 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 AGTAA	AGAAT AGTAT	AGAAC AGTAC	AGAAG AGTAG	AGATA AGTTA	AGATT AGTTT	AGATC AGTTC	AGATG AGTTG	AGACA AGTCA	AGACT AGTCT	AGACC AGTCC	AGACG AGTCG	AGAGA AGTGA	AGAGT AGTGT	AGAGC AGTGC	AGAGG AGTGG
AGC	AGCAA	AGCAT	AGCAC	AGCAG	AGCTA	AGTTT	AGCTC	AGTTG	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	TCAAT	TCAAC	TCAAC	TCATA	TTGTT	TTGTC	TTGTG	TTGCA	TTGCT	TTGCC	TTGCG	TTGGA	TTGGT	TTGGC	TTGGG
TCA	TCAAA TCTAA	TCAAT TCTAT	TCAAC TCTAC	TCAAG TCTAG	TCATA TCTTA	TCATT TCTTT	TCATC TCTTC	TCATG TCTTG	TCACA TCTCA	TCACT TCTCT	TCACC TCTCC	TCACG TCTCG	TCAGA TCTGA	TCAGT TCTGT	TCAGC TCTGC	TCAGG 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 CTAAA	CAGAT CTAAT	CAGAC CTAAC	CAGAG CTAAG	CAGTA CTATA	CAGTT CTATT	CAGTC CTATC	CAGTG CTATG	CAGCA CTACA	CAGCT CTACT	CAGCC CTACC	CAGCG CTACG	CAGGA CTAGA	CAGGT CTAGT	CAGGC CTAGC	CAGGG CTAGG
CTA	CTAAA	CTTAT	CTTAC	CTTAG	CTTTA	CTTTT	CTTTC	CTTTG	CTTCA	CTTCT	CTTCC	CTACG	CTAGA	CTAGT	CTAGC	CTAGG
CTC	CTCAA	CTCAT	CTCAC	CTCAG	CTCTA	СТСТТ	стстс	CTCTG	CTCCA	СТССТ	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	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 CGCAA	CGTAT CGCAT	CGTAC CGCAC	CGTAG CGCAG	CGTTA CGCTA	CGTTT CGCTT	CGTTC CGCTC	CGTTG	CGTCA CGCCA	CGTCT CGCCT	CGTCC CGCCC	CGTCG CGCCG	CGTGA CGCGA	CGTGT CGCGT	CGTGC CGCGC	CGTGG CGCGG
CGG	CGGAA	CGCAT	CGCAC	CGCAG	CGCTA	CGGTT	CGGTC	CGCTG CGGTG	CGCCA	CGGCT	CGGCC	CGGCG	CGCGA	CGGGT	CGGGC	CGCGG
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
	GACAA	GACAT			GACTA		GACTC	GACTG			GACCC				GACGC	
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		GTCAT	GTCAC	GTCAG	GTCTA	GTCTT	GTCTC	GTCTG	GTCCA	GTCCT	GTCCC	GTCCG	GTCGA	GTCGT	GTCGC	GTCGG
GTG	GTGAA	GTGAT	GTGAC	GTGAG	GTGTA	GTGTT		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 GCCAA	GCTAT GCCAT	GCTAC GCCAC	GCTAG GCCAG	GCTTA GCCTA	GCTTT GCCTT	GCTTC GCCTC	GCTTG GCCTG	GCTCA GCCCA	GCTCT GCCCT	GCTCC GCCCC	GCTCG GCCCG	GCTGA GCCGA	GCTGT GCCGT	GCTGC GCCGC	GCTGG 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

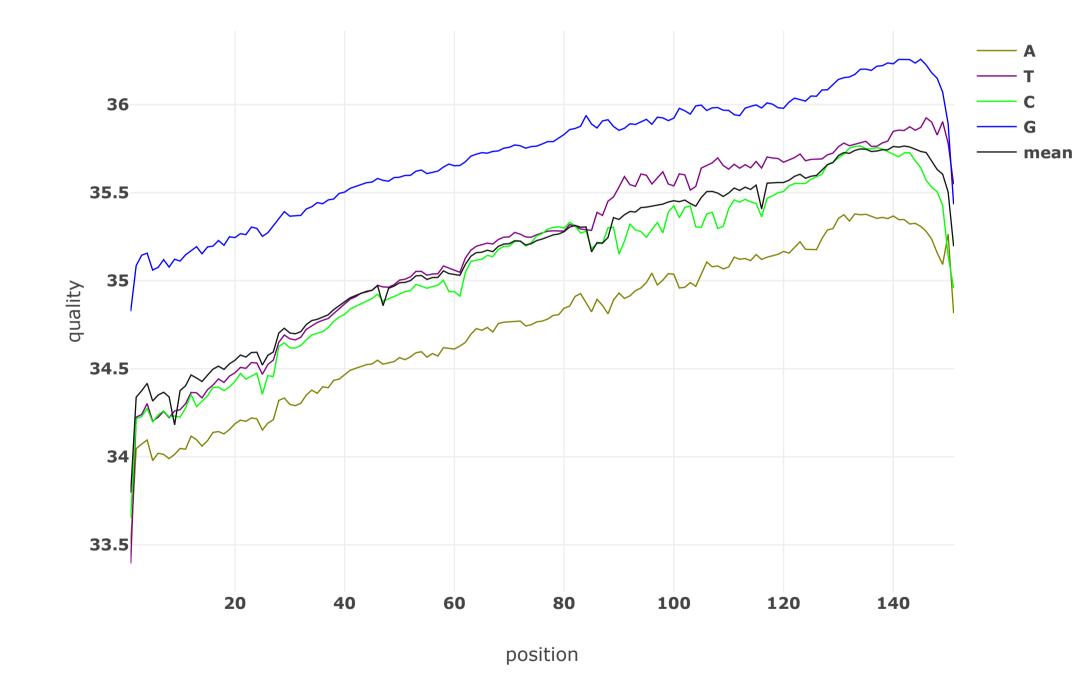
overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 151
AC	15997 (0.119128%)	
ACACACACACACACAT	30444 (0.113356%)	
AG	3689 (0.027472%)	
CACACACACACACACACACACACACACACACACACACA	9315 (0.069368%)	
ccccccccccccccccccccccccccccccccccccccc	1974 (0.036750%)	
стстстстстстстстстстстстстстст	4470 (0.033288%)	
CTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	2929 (0.021812%)	
GA	3651 (0.027189%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	476 (0.003545%)	
GT	16195 (0.120602%)	
TCACACACACACACACACACACACACACACACACACACA	9468 (0.070507%)	
тстстстстстстстстстстстстстстстс	5715 (0.042559%)	

TCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	5531 (0.041189%)	
тстстстстстстстстстстстстстстстс	6602 (0.049164%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTT	183 (0.001363%)	
TTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	3336 (0.024843%)	
TTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	9758 (0.072667%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	1290 (0.009606%)	

After filtering

After filtering: read1: quality

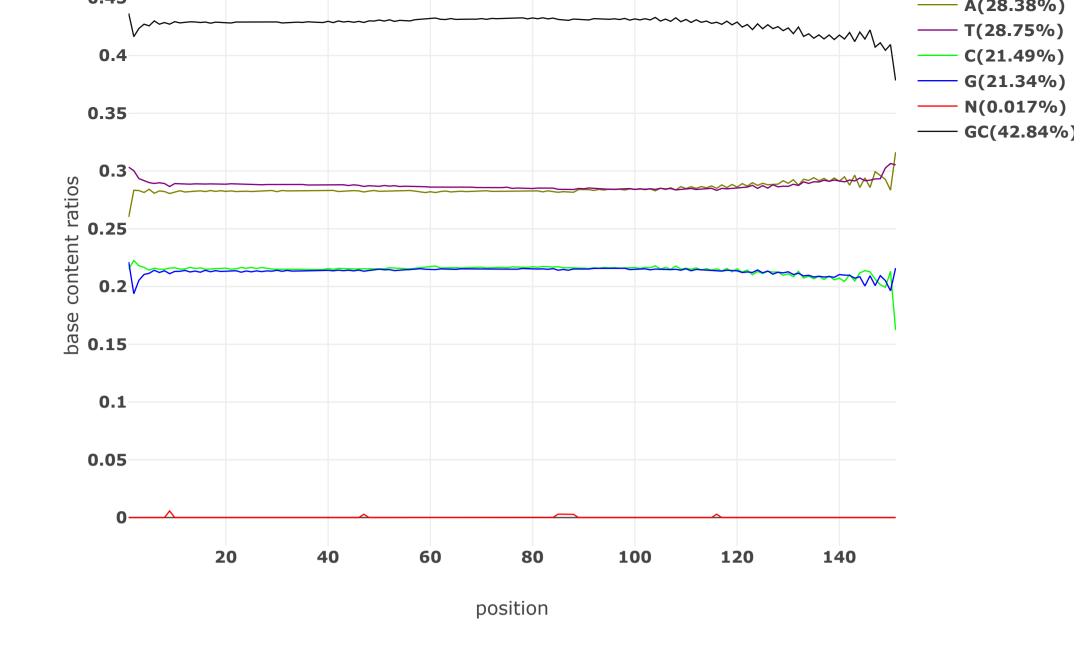
Value of each position will be shown on mouse over.



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.

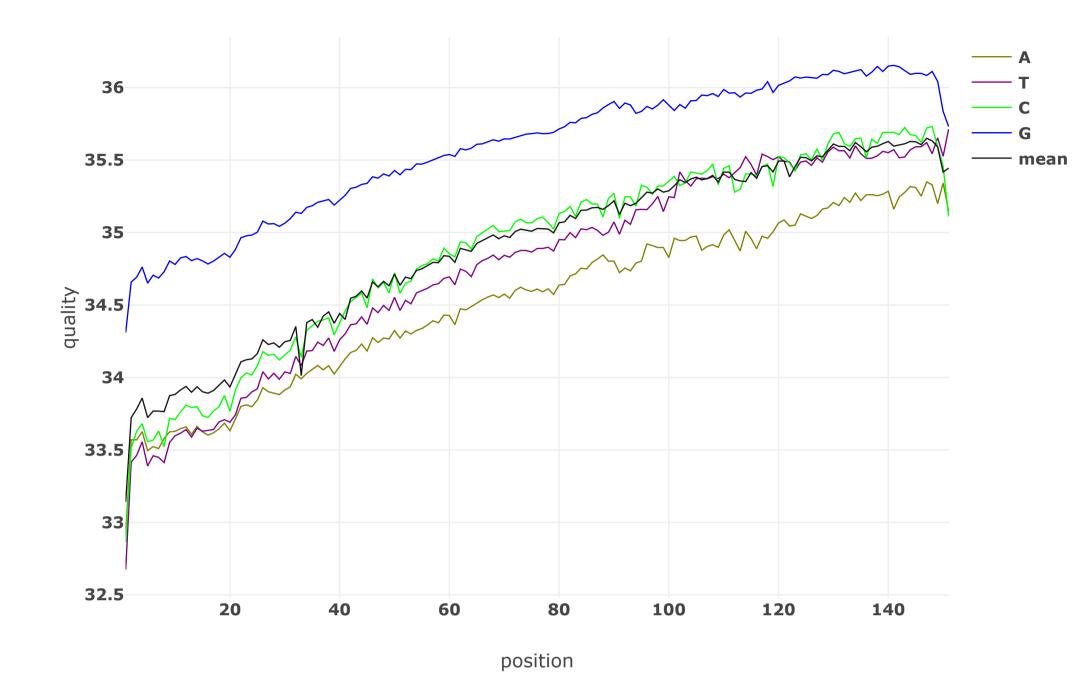
vari		kground		Larger	Counts				snown or		over.	66	C 4	CT	66	66
0.0.0	AA	AT	AC	AG	TA	TT	TC	TG	CA	CT	CC	CG	GA	GT	GC	GG
AAA	AAAAA	AAAAT	AAAAC	AAAAG	AAATA	AAATT	AAATC	AAATG	AAACA	AAACT	AAACC	AAACG	AAAGA	AAAGT	AAAGC	AAAGG
AAT	AATAA	AATAT	AATAC	AATAG	AATTA	AATTT	AATTC	AATTG	AATCA	AATCT	AATCC	AATCG	AATGA	AATGT	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	TACTO	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	TCAAC	TTGTA	TCATT	TCATC	TTGTG	TTGCA	TTGCT	TCACC	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	TCCAC	TCTAG	TCTTA	TCCTT	TCTTC	TCTTG	TCTCA TCCCA	TCTCT TCCCT	TCTCC	TCTCG TCCCG	TCTGA	TCCCT	TCTGC	TCTGG
TCC	TCCAA	TCCAT	TCCAC	TCCAG	TCCTA	TCCTT	TCCTC	TCCTG			TCCCC		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 TGTAG	TGATA	TGATT	TGATC	TGATG	TGACA	TGACT	TGACC	TGACG	TGAGA	TGAGT	TGAGC	TGAGG TGTGG
	TGTAA	TGTAT	TGTAC		TGTTA	TGTTT	TGTTC	TGTTG	TGTCA TGCCA	TGTCT TGCCT	TGTCC TGCCC	TGTCG TGCCG	TGTGA	TGTGT	TGTGC TGCGC	
TGC	TGCAA	TGCAT	TGCAC	TGCAG	TGCTA	TGCTT	TGCTC	TGCTG					TGCGA	TGCGT		TGCGG
TGG	TGGAA CAAAA	TGGAT CAAAT	TGGAC	TGGAG CAAAG	TGGTA CAATA	TGGTT CAATT	TGGTC CAATC	TGGTG CAATG	TGGCA CAACA	TGGCT CAACT	TGGCC CAACC	TGGCG CAACG	TGGGA CAAGA	TGGGT CAAGT	TGGGC CAAGC	TGGGG CAAGG
CAA	CATAA	CATAT	CAAAC CATAC	CATAG	CATTA	CATTT	CATTC	CATTG	CATCA	CATCT	CATCC	CATCG	CAAGA	CATGT	CATGC	CAAGG
CAT	CATAA	CACAT	CACAC	CATAG	CATTA		CATTC	CATTG	CATCA	CACCT	CACCC	CATCG	CATGA	CATGT	CATGC	CATGG
CAC	CACAA	CACAT	CACAC	CACAG	CACTA	CACTT CAGTT	CACTC	CACTG	CACCA	CACCT	CACCC	CACCG	CACGA	CACGT	CACGC	CACGG
CAG	CTAAA	CTAAT	CTAAC	CTAAG	CTATA	CTATT	CTATC	CTATG	CTACA	CTACT	CTACC	CTACG	CTAGA	CTAGT	CTAGC	CAGGG
CTA	CTAAA	CTTAT	CTAAC	CTAAG	CTTTA	CTTTT	CTTTC	CTTTG	CTACA	CTACT	CTTCC	CTACG	CTAGA	CTTGT	CTAGC	CTAGG
CTC	CTCAA		CTCAC	CTCAG	CTCTA	CTCTT	CTCTC	CTCTG	CTCCA	CTCCT	CTCCC		CTCGA		CTCGC	CTCGG
CTG	CTGAA	CTCAT CTGAT	CTGAC	CTGAG	CTGTA	CTGTT	CTGTC	CTGTG	CTGCA	CTGCT	CTGCC	CTCCG CTGCG	CTGGA	CTCGT CTGGT	CTGGC	CTGGG
	CCAAA			CCAAG		CCATT			-				CCAGA			CCAGG
CCA	CCTAA	CCAAT CCTAT	CCAAC CCTAC	CCTAG	CCATA CCTTA	CCTTT	CCATC CCTTC	CCATG CCTTG	CCACA CCTCA	CCACT CCTCT	CCACC CCTCC	CCACG CCTCG	CCAGA	CCAGT CCTGT	CCAGC CCTGC	CCAGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	CCCTC	CCCTG	CCCCA	CCCCT	CCCCC	CCCCG	CCCGA	CCCGT	CCCGC	CCCGG
		CCGAT	CCGAC	CCGAG	CCGTA	CCGTT	CCGTC	CCGTG	CCGCA	CCGCT	CCGCC		CCGGA	CCGGT	CCGGC	CCGGG
CCG	CCGAA CGAAA	CGAT	CGAC	CGAG	CGATA	CGATT		CGATG	CGACA	CGACT	CGACC	CCGCG CGACG	CGAGA	CGAGT	CGAGC	CGAGG
CGA				CGTAG	CGATA		CGATC		CGTCA	CGTCT			CGAGA		CGAGC	CGAGG
CGT	CCCAA	CGTAT	CGTAC		CGTTA	CGTTT	CGTTC	CGTTG			CGTCC	CGTCG		CGTGT	CGCGC	CGCGG
CGC	CGCAA CGGAA	CGCAT	CGCAC	CGCAG CGGAG	CGCTA	CGCTT CGGTT	CGCTC CGGTC	CGCTG	CGCCA	CGCCT	CGCCC	CGCCG CGGCG	CGCGA	CGCGT	CGGGC	CGGGG
CGG	CGGAA	CGGAT	CGGAC	CGGAG	CGGTA	CGGTT	CGGTC	CGGTG	CGGCA	CGGCT	CGGCC	CGGCG	CGGGA	CGGGT	CGGGC	CGGGG

GAA	GAAAA	GAAAT	GAAAC	GAAAG	GAATA	GAATT	GAATC	GAATG	GAACA	GAACT	GAACC	GAACG	GAAGA	GAAGT	GAAGC	GAAGG
GAT	GATAA	GATAT	GATAC	GATAG	GATTA	GATTT	GATTC	GATTG	GATCA	GATCT	GATCC	GATCG	GATGA	GATGT	GATGC	GATGG
GAC	GACAA	GACAT	GACAC	GACAG	GACTA	GACTT	GACTC	GACTG	GACCA	GACCT	GACCC	GACCG	GACGA	GACGT	GACGC	GACGG
GAG	GAGAA	GAGAT	GAGAC	GAGAG	GAGTA	GAGTT	GAGTC	GAGTG	GAGCA	GAGCT	GAGCC	GAGCG	GAGGA	GAGGT	GAGGC	GAGGG
GTA	GTAAA	GTAAT	GTAAC	GTAAG	GTATA	GTATT	GTATC	GTATG	GTACA	GTACT	GTACC	GTACG	GTAGA	GTAGT	GTAGC	GTAGG
GTT	GTTAA	GTTAT	GTTAC	GTTAG	GTTTA	GTTTT	GTTTC	GTTTG	GTTCA	GTTCT	GTTCC	GTTCG	GTTGA	GTTGT	GTTGC	GTTGG
GTC	GTCAA	GTCAT	GTCAC	GTCAG	GTCTA	GTCTT	GTCTC	GTCTG	GTCCA	GTCCT	GTCCC	GTCCG	GTCGA	GTCGT	GTCGC	GTCGG
GTG	GTGAA	GTGAT	GTGAC	GTGAG	GTGTA	GTGTT	GTGTC	GTGTG	GTGCA	GTGCT	GTGCC	GTGCG	GTGGA	GTGGT	GTGGC	GTGGG
GCA	GCAAA	GCAAT	GCAAC	GCAAG	GCATA	GCATT	GCATC	GCATG	GCACA	GCACT	GCACC	GCACG	GCAGA	GCAGT	GCAGC	GCAGG
GCT	GCTAA	GCTAT	GCTAC	GCTAG	GCTTA	GCTTT	GCTTC	GCTTG	GCTCA	GCTCT	GCTCC	GCTCG	GCTGA	GCTGT	GCTGC	GCTGG
GCC	GCCAA	GCCAT	GCCAC	GCCAG	GCCTA	GCCTT	GCCTC	GCCTG	GCCCA	GCCCT	GCCCC	GCCCG	GCCGA	GCCGT	GCCGC	GCCGG
GCG	GCGAA	GCGAT	GCGAC	GCGAG	GCGTA	GCGTT	GCGTC	GCGTG	GCGCA	GCGCT	GCGCC	GCGCG	GCGGA	GCGGT	GCGGC	GCGGG
GGA	GGAAA	GGAAT	GGAAC	GGAAG	GGATA	GGATT	GGATC	GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGAGG
GGT	GGTAA	GGTAT	GGTAC	GGTAG	GGTTA	GGTTT	GGTTC	GGTTG	GGTCA	GGTCT	GGTCC	GGTCG	GGTGA	GGTGT	GGTGC	GGTGG
GGC	GGCAA	GGCAT	GGCAC	GGCAG	GGCTA	GGCTT	GGCTC	GGCTG	GGCCA	GGCCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGCGG
GGG	GGGAA	GGGAT	GGGAC	GGGAG	GGGTA	GGGTT	GGGTC	GGGTG	GGGCA	GGGCT	GGGCC	GGGCG	GGGGA	GGGGT	GGGGC	GGGGG

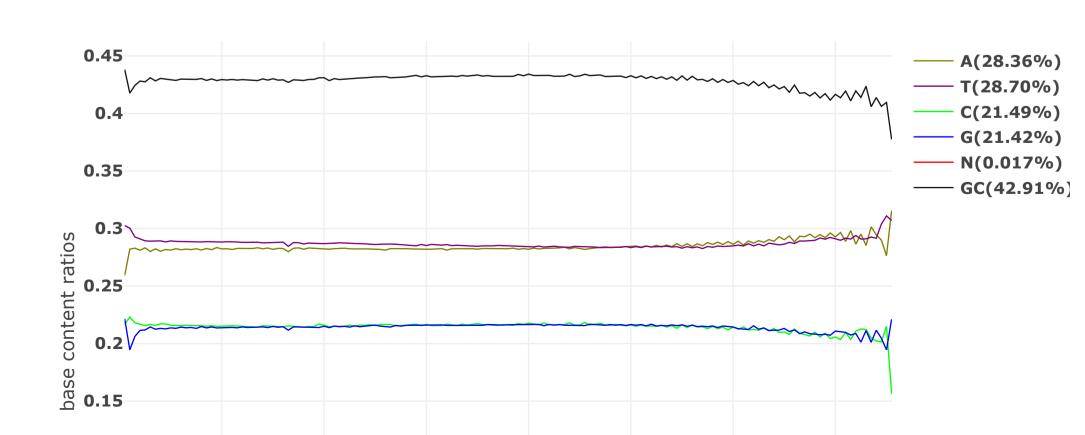
After filtering: read1: overrepresented sequences

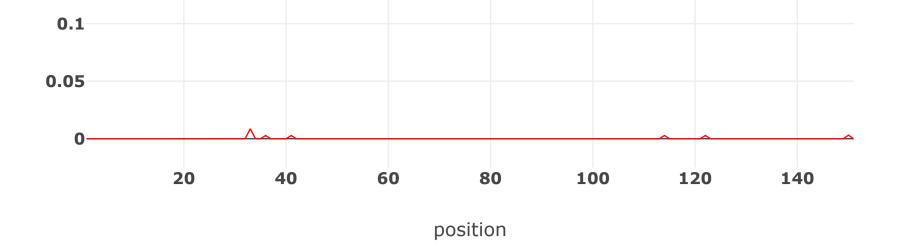
overrepresented sequence	count (% of bases)	distribution: cycle 1 \sim cycle 151
AACACACACACACACACACACACACACACACACA	5627 (0.047841%)	
ACACACACACACACACACACACACACACACACAA	207 (0.001760%)	
AC	9617 (0.081765%)	
ACACACACACACACACACACACACACACACACACAT	284 (0.002415%)	
AG	2068 (0.017582%)	
CACACACACACACACACACACACACACACACACACA	8443 (0.071783%)	
ccccccccccccccccccccccccccccccccccccccc	558 (0.004744%)	
CTCACACACACACACACACACACACACACACACA	5385 (0.045784%)	
стстстстстстстстстстстстстстст	3944 (0.033532%)	
CTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT	85 (0.001807%)	
стбтбтбтбтбтбтбтбтбтбтбтбтбтбтбт	6733 (0.057245%)	
GA	2167 (0.018424%)	
стстстстстстстстстстстстстстс	344 (0.002925%)	
стстстстстстстстстстстстстстстст	13655 (0.116096%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	63 (0.001339%)	
TCACACACACACACACACACACACACACACACACAC	2022 (0.017191%)	
тстстстстстстстстстстстстстстстс	4875 (0.041448%)	
TCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTC	132 (0.002806%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTA	184 (0.001564%)	
гөтөтөтөтөтөтөтөтөтөтөтөтөтөтөтө	6730 (0.057219%)	
TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	87 (0.001849%)	
ттбтбтбтбтбтбтбтбтбтбтбтбтбтбтбтбт	2562 (0.021782%)	
TTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	7313 (0.062176%)	
ІТТТТТТТТ	31611 (0.067190%)	

After filtering: read2: quality



After filtering: read2: base contents





After filtering: read2: KMER counting

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

	AA	AT	AC	AG	TA	TT	TC	TG	CA	СТ	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	ATTCCC	ATTGA	ATTGT	ATTGC	ATTGG
ATC	ATCAA	ATCAT	ATCAC	ATCAG ATGAG	ATCTA	ATCTT	ATCTC	ATCTG	ATCCA	ATCCT	ATCCC	ATCCC	ATCGA	ATCGT	ATCGC ATGGC	ATCGG
ATG ACA	ATGAA ACAAA	ATGAT ACAAT	ATGAC ACAAC	ACAAG	ATGTA ACATA	ATGTT ACATT	ATGTC ACATC	ATGTG ACATG	ATGCA ACACA	ATGCT ACACT	ATGCC ACACC	ATGCG ACACG	ATGGA ACAGA	ATGGT ACAGT	ACAGC	ATGGG 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 TTTAA	TTAAT TTTAT	TTAAC TTTAC	TTAAG TTTAG	TTATA TTTTA	TTATT TTTTT	TTATC TTTTC	TTATG TTTTG	TTACA TTTCA	TTACT TTTCT	TTACC TTTCC	TTACG TTTCG	TTAGA TTTGA	TTAGT TTTGT	TTAGC TTTGC	TTAGG 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	ТСТСТ	ТСТСС	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 CAAGT	TGGGC	TGGGG
CAA	CAAAA CATAA	CAAAT CATAT	CAAAC CATAC	CAAAG CATAG	CAATA CATTA	CAATT CATTT	CAATC CATTC	CAATG CATTG	CAACA CATCA	CAACT CATCT	CAACC CATCC	CAACG CATCG	CAAGA CATGA	CATGT	CAAGC CATGC	CAAGG CATGG
CAC	CACAA	CACAT	CACAC	CATAG	CACTA	CACTT	CACTC	CACTG	CACCA	CACCT	CACCC	CACCG	CACGA	CACGT	CACGC	CATGG
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	СТТСС	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	CCTCT	CCTCC	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG			CCCTC	CCCTG		CCCCT		CCCCG	CCCGA	CCCGT		CCCGG
CCG	CCGAA CGAAA	CCGAT	CCGAC	CCGAG	CCATA	CCATT	CCATC	CCATC	CCGCA	CCGCT		CCGCG	CCGGA	CCGGT CGAGT	CCGGC CGAGC	CCGGG
CGA	CGTAA	CGAAT CGTAT	CGAAC CGTAC	CGAAG CGTAG	CGATA CGTTA	CGATT CGTTT	CGATC CGTTC	CGATG CGTTG	CGACA CGTCA	CGACT CGTCT	CGACC CGTCC	CGACG CGTCG	CGAGA CGTGA	CGTGT	CGTGC	CGAGG 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 GTG	GTCAA GTGAA	GTCAT GTGAT	GTCAC GTGAC	GTCAG GTGAG	GTCTA GTGTA	GTCTT GTGTT	GTCTC GTGTC	GTCTG GTGTG	GTCCA GTGCA	GTCCT GTGCT	GTCCC GTGCC	GTCCG GTGCG	GTCGA GTGGA	GTCGT GTGGT	GTCGC GTGGC	GTCGG GTGGG
GCA	GCAAA	GCAAT	GCAAC	GCAAG	GCATA	GCATT	GCATC	GCATG	GCACA	GCACT	GCACC	GCACG	GCAGA	GCAGT	GCAGC	GCAGG
GCA	GCTAA	GCAAT	GCTAC	GCTAG	GCTTA	GCTTT	GCTTC	GCTTG	GCTCA	GCTCT	GCTCC	GCTCG	GCAGA	GCAGT	GCTGC	GCAGG
	GCCAA	GCCAT	GCCAC	GCCAG	GCCTA	GCCTT	GCCTC	GCCTG	GCCCA	GCCCT	GCCCC	GCCCG	GCCGA	GCCGT	GCCGC	GCCGG
GCC	UCCAA								GCGCA	GCGCT	GCGCC	GCGCG	GCGGA	GCGGT	GCGGC	GCGGG
GCC GCG	GCGAA		GCGAC_	GCGAG_	GCGTA_	GCGTT	GCGIC_	<u> </u>	I UCUCA	00001				1 0COOL		
GCC GCG GGA		GCGAT GGAAT	GCGAC GGAAC	GCGAG GGAAG	GCGTA GGATA	GCGTT	GCGTC GGATC	GCGTG GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGAGG
GCG	GCGAA	GCGAT			GGATA GGTTA											
GCG GGA	GCGAA GGAAA	GCGAT GGAAT	GGAAC	GGAAG	GGATA	GGATT	GGATC	GGATG	GGACA	GGACT	GGACC	GGACG	GGAGA	GGAGT	GGAGC	GGAGG

After filtering: read2: overrepresented sequences

Sampling rate: 1 / 20

ump g · · · · · · · · · · · · · · · ·										
overrepresented sequence	count (% of bases)	distribution: cycle 1 ~ cycle 151								
AC	12700 (0.109041%)									

ACACACACACACACAT	24018 (0.103108%)	
AG	3103 (0.026642%)	
CACACACACACACACACACACACACACACACACACA	7359 (0.063184%)	
стстстстстстстстстстстстстстстст	3450 (0.029621%)	
СТБТБТБТБТБТБТБТБТБТБТБТБТБТБТБТ	2359 (0.020254%)	
GA	3029 (0.026007%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTG	378 (0.003245%)	
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	13479 (0.115729%)	
TCACACACACACACACACACACACACACACACACACACA	7257 (0.062308%)	
тстстстстстстстстстстстстстстстс	4337 (0.037237%)	
тстстстстстстстстстстстстстстстстс	4349 (0.037340%)	
тстстстстстстстстстстстстстстстс	5874 (0.050434%)	
тстстстстстстстстстстстстстстстст	184 (0.001580%)	
ттстстстстстстстстстстстстстстст	2566 (0.022031%)	
TTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG	7533 (0.064678%)	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	39 (0.000335%)	

fastp -i /work/frr6/SHAD/NXTRIM/MP5k_R1.pe.fastq.gz -I /work/frr6/SHAD/NXTRIM/MP5k_R2.pe.fastq.gz -o MP5k_pe_F.trimmed.fq.gz -0
MP5k_pe_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=MP5k_pe.json --html=MP5k_pe.html --report_title=MP5k_pe --thread=8

fastp 0.19.6, at 2019-01-18 11:50:15