

fastp report

Summary

General

fastp version:	0.20.0 (https://github.com/OpenGene/fastp)
sequencing:	paired end (150 cycles + 150 cycles)
mean length before filtering:	148bp, 147bp
mean length after filtering:	147bp, 147bp
duplication rate:	8.521677%
Insert size peak:	239

Before filtering

total reads:	35.108356 M
total bases:	5.193082 G
Q20 bases:	5.120669 G (98.605586%)
Q30 bases:	4.969532 G (95.695227%)
GC content:	52.645179%

After filtering

total reads:	35.101238 M
total bases:	5.179270 G
Q20 bases:	5.107252 G (98.609487%)
Q30 bases:	4.956733 G (95.703304%)
GC content:	52.652993%

Filtering result

reads passed filters:	35.101238 M (99.979726%)
reads with low quality:	2 (0.000006%)
reads with too many N:	7.116000 K (0.020269%)
reads too short:	0 (0.000000%)

Adapters

Adapter or bad ligation of read1

The input has little adapter percentage (~0.238992%), probably it's trimmed before.

Sequence	Occurrences
A	45459
AG	46450
AGA	45893
AGAT	45005
AGATC	44722
AGATCG	44215
AGATCGG	44403
AGATCGGA	43185
AGATCGGAA	41891
AGATCGGAAG	41834
AGATCGGAAGA	41314
AGATCGGAAGAG	40792
AGATCGGAAGAGC	40660
AGATCGGAAGAGCA	40029
AGATCGGAAGAGCAC	38972
AGATCGGAAGAGCACA	38048
other adapter sequences	37438

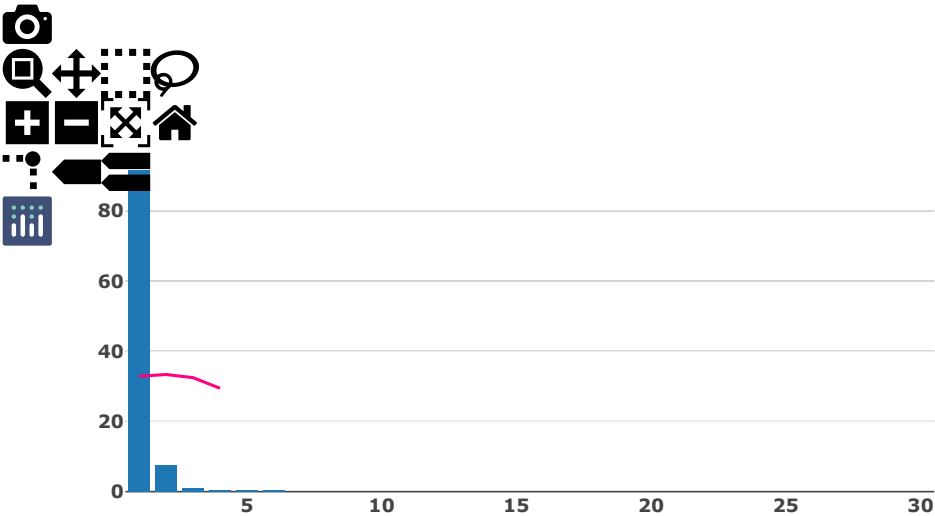
Adapter or bad ligation of read2

The input has little adapter percentage (~0.253582%), probably it's trimmed before.

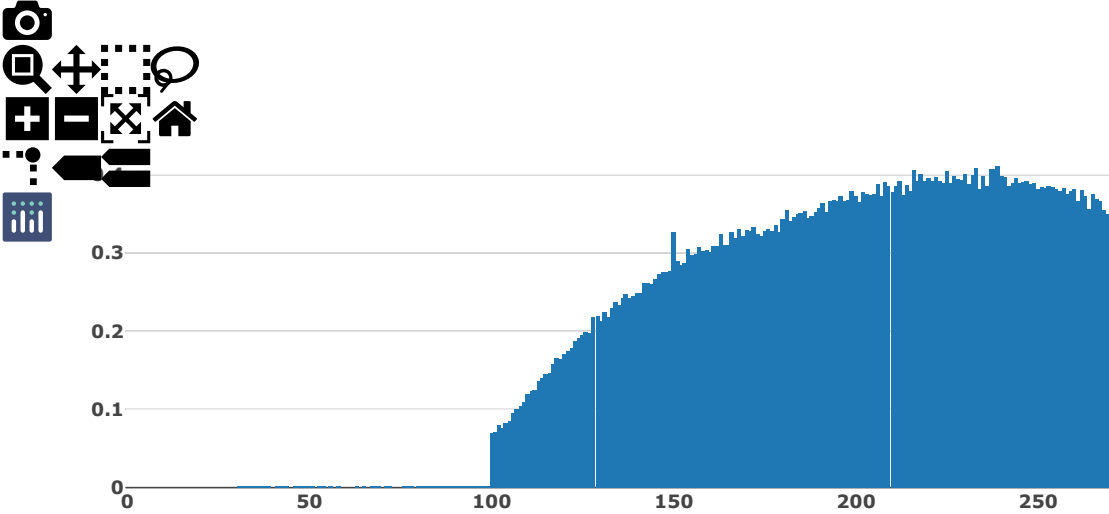
Sequence	Occurrences
A	48721

AG	47013
AGA	45799
AGAT	44734
AGATC	44756
AGATCG	44069
AGATCGG	43994
AGATCGGA	42800
AGATCGGAA	41912
AGATCGGAAG	41732
AGATCGGAAGA	40784
AGATCGGAAGAG	40502
AGATCGGAAGAGC	40283
AGATCGGAAGAGCG	41593
AGATCGGAAGAGCGT	36790
AGATCGGAAGAGCGTC	37370
other adapter sequences	69603

Duplication



Insert size estimation

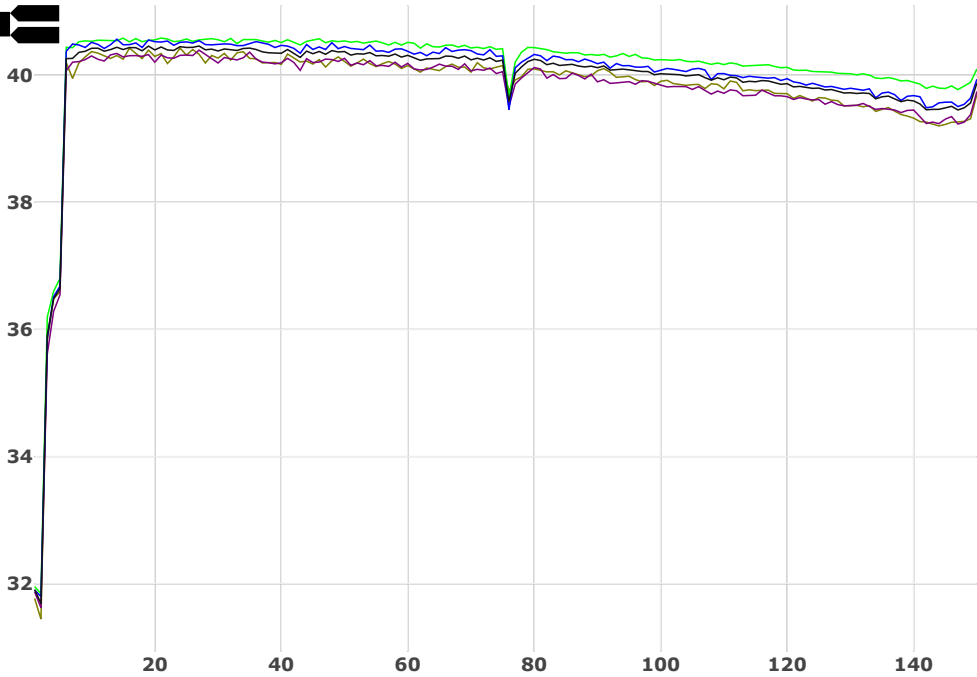


This estimation is based on paired-end overlap analysis, and there are 47.178487% reads found not overlapped. The nonoverlapped read pairs may have insert size <30 or >270, or contain too much sequencing errors to be detected as overlapped.

Before filtering

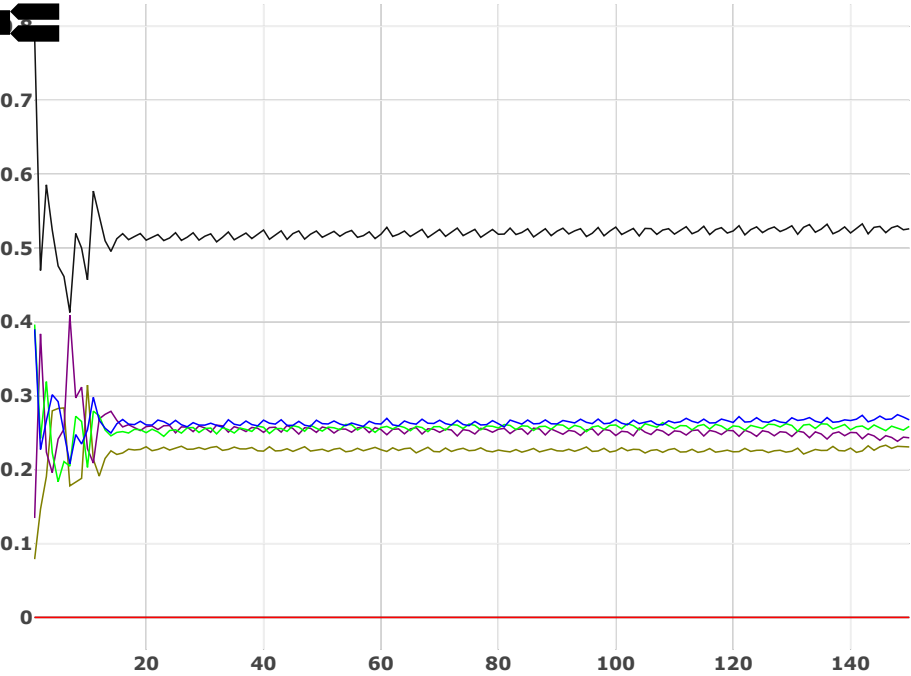
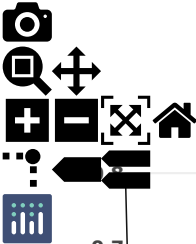
Before filtering: read1: quality

Value of each position will be shown on mouse over.



Before filtering: read1: base contents

Value of each position will be shown on mouse over.



Before filtering: read1: KMER counting

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

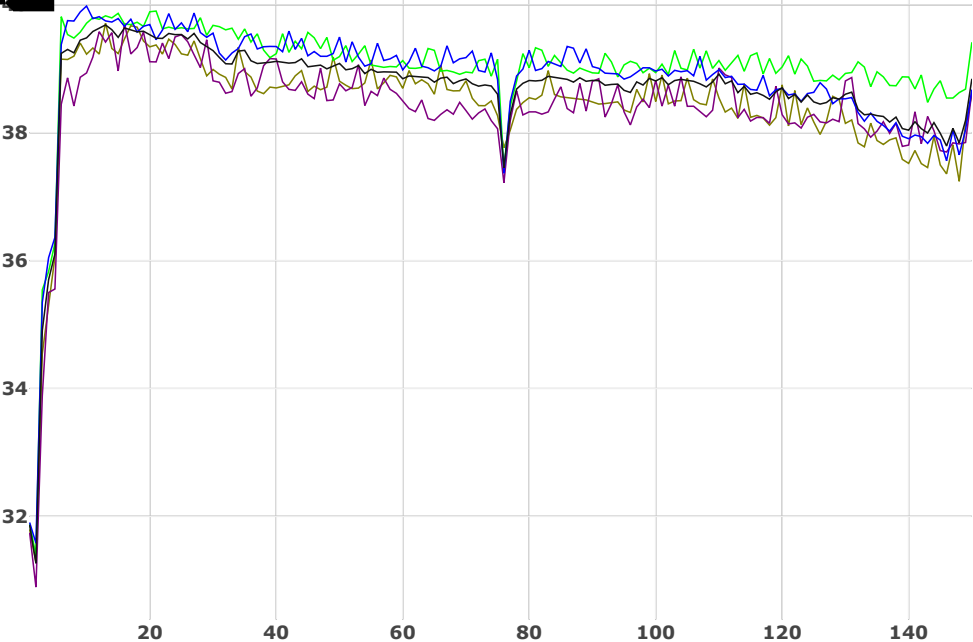
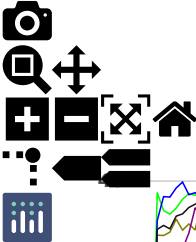
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ACT	ACTAA	ACTAT	ACTAC	ACTAG	ACTTA	ACTTT	ACTTC	ACTTG	ACTCA	ACTCT	ACTCC	ACTCG	ACTGA	ACTGT	ACTGC	ACTGG
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- A(22.55%)
- T(25.33%)
- C(25.65%)
- G(26.45%)
- N(0.000%)
- GC(52.11%)

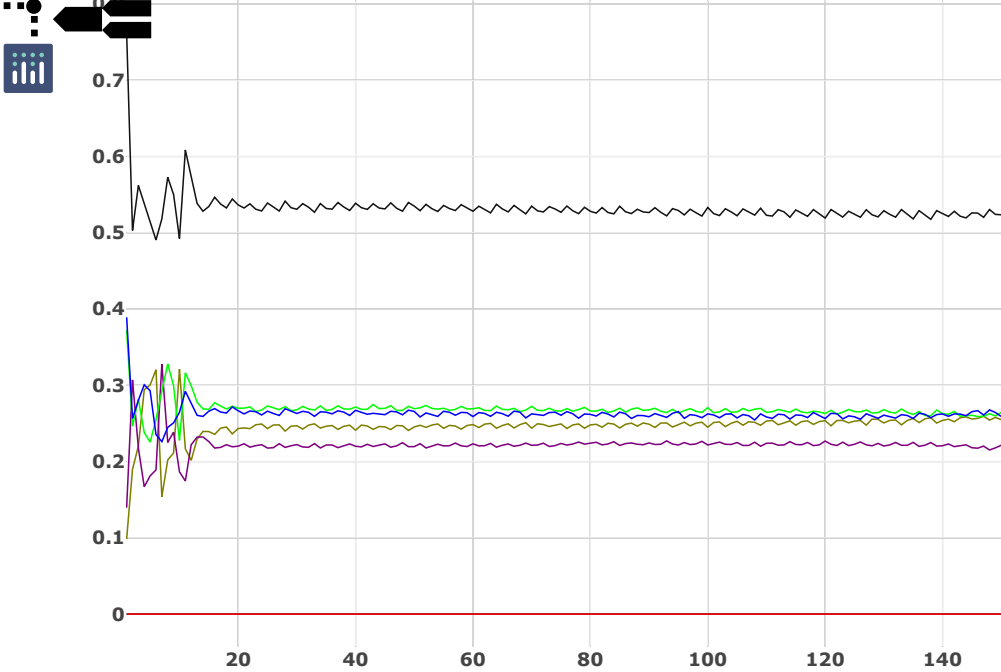
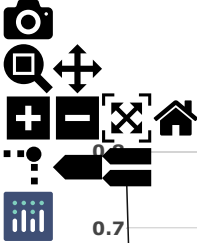
Before filtering: read2: quality

Value of each position will be shown on mouse over.



Before filtering: read2: base contents

Value of each position will be shown on mouse over.



Before filtering: read2: KMER counting

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

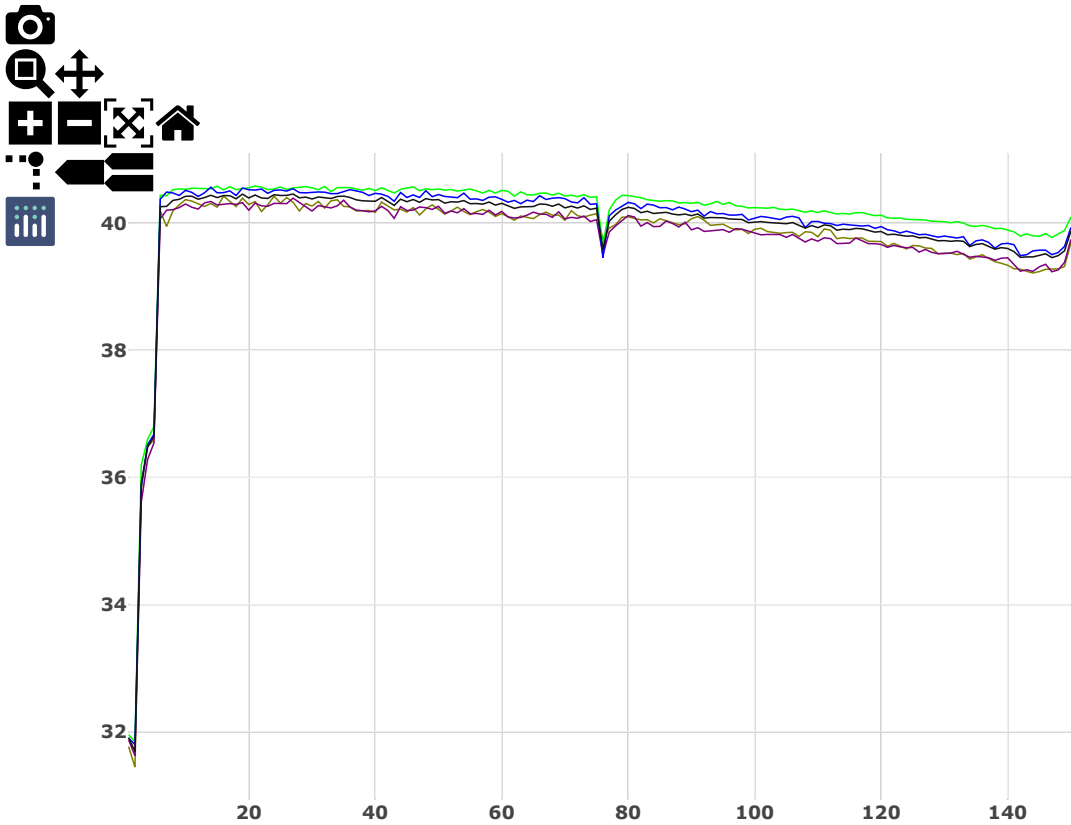
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AAC	AACAA	AACAT	AACAC	AACAG	AACTA	AAC TT	AAC TC	AAC TG	AACCA	AACCT	AACCC	AACCG	AACGA	AACGT	AACGC	AACGG
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CAA	CAAAA	CA AAT	CA A AC	CA A AG	CA A TA	CA A TT	CA A TC	CA A TG	CA A CA	CA A CT	CA A CC	CA A CG	CA A GA	CA A GT	CA A GC	CA A GG
CAT	CATAA	CATAT	CATAC	CATAG	CATTA	CATTT	CATTC	CATTG	CATCA	CATCT	CATCC	CATCG	CATGA	CATGT	CATGC	CATGG
CAC	CACAA	CACAT	CACAC	CACAG	CAC TA	CAC TT	CAC TC	CAC TG	CAC CA	CAC CT	CAC CC	CAC CG	CAC GA	CAC GT	CAC GC	CAC GG
CAG	CAGAA	CAGAT	CAGAC	CAGAG	CAG TA	CAG TT	CAG TC	CAG TG	CAG CA	CAG CT	CAG CC	CAG CG	CAG GA	CAG GT	CAG GC	CAG GG
CTA	CTAAA	CT AAT	CT A AC	CT A AG	CT A TA	CT A TT	CT A TC	CT A TG	CT A CA	CT A CT	CT A CC	CT A CG	CT A GA	CT A GT	CT A GC	CT A GG
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CTG	CTGAA	CTGAT	CTGAC	CTGAG	CTGTA	CTGTT	CTGTC	CTGTG	CTGCA	CTGCT	CTGCC	CTGCG	CTGGA	CTGGT	CTGGC	CTGGG
CCA	CCAAA	CC AAT	CC A AC	CC A AG	CC A TA	CC A TT	CC A TC	CC A TG	CC A CA	CC A CT	CC A CC	CC A CG	CC A GA	CC A GT	CC A GC	CC A GG
CCT	CCTAA	CCTAT	CCTAC	CCTAG	CCTTA	CCTTT	CCTTC	CCTTG	CCTCA	CCTCT	CCTCC	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	CCCTC	CCCTG	CCCCA	CC CCT	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	CG AAT	CG A AC	CG A AG	CG A TA	CG A TT	CG A TC	CG A TG	CG A CA	CG A CT	CG A CC	CG A CG	CG A GA	CG A GT	CG A GC	CG A GG
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	CG CCT	CGCCC	CGCCG	CGCGA	CGCGT	CGCGC	CGCCG
CGG	CGGAA	CGGAT	CGGAC	CGGAG	CGGTA	CGGTT	CGGTC	CGGTG	CGGCA	CGGCT	CGGCC	CGGCG	CGGGA	CGGGT	CGGGC	CGGGG
GAA	GAAAA	G A AAT	G A A AC	G A A AG	G A A TA	G A A TT	G A A TC	G A A TG	G A A CA	G A A CT	G A A CC	G A A CG	G A A GA	G A A GT	G A A GC	G A A GG
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	GTA AA	GTA AT	GTA AC	GTA AG	GTA TA	GTA TT	GTA TC	GTA TG	GTA CA	GTA CT	GTA CC	GTA CG	GTA GA	GTA GT	GTA GC	GTA GG
GTT	GTTAA	GTTAT	GTTAC	GTTAG	GTTTA	GTTTT	GTTTC	GTTTG	GTTCA	GTTCT	GTTCC	GTTCG	GTTGA	GTTGT	GTTGC	GTTGG
GTC	GTC AA	GTC AT	GTC AC	GTC AG	GTC TA	GTC TT	GTC TC	GTC TG	GTC CA	GTC CT	GTC CC	GTC CG	GTC GA	GTC GT	GTC GC	GTC GG
GTG	GTCAA	GTGAT	GTGAC	GTGAG	GTGTA	GTGTT	GTGTC	GTGTG	GTGCA	GTGCT	GTGCC	GTGCG	GTGGA	GTGGT	GTGGC	GTGGG
GCA	GCAAA	GCAAT	GCAAC	GCAAG	GCA TA	GCA TT	GCA TC	GCA TG	GCA CA	GCA CT	GCA CC	GCA CG	GCA GA	GCA GT	GCA GC	GCA GG
GCT	GCTAA	GCTAT	GCTAC	GCTAG	GCTTA	GCTTT	GCTTC	GCTTG	GCTCA	GCTCT	GCTCC	GCTCG	GCTGA	GCTGT	GCTGC	GCTGG
GCC	GCCAA	GCCAT	GCCAC	GCCAG	GCC TA	GCC TT	GCC TC	GCC TG	GCC CA	GCC CT	GCC CC	GCC CG	GCC GA	GCC GT	GCC GC	GCC GG
GCG	GCGAA	GCGAT	GCGAC	GCGAG	GCGTA	GCGTT	GCGTC	GCGTG	GCGCA	GCGCT	GCGCC	GCGCG	GCGGA	GCGGT	GCGGC	GCGGG
GGA	GGAAA	GG AAT	GG A AC	GG A AG	GG A TA	GG A TT	GG A TC	GG A TG	GG A CA	GG A CT	GG A CC	GG A CG	GG A GA	GG A GT	GG A GC	GG A GG
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	GG CCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGCCG
GGG	GGGAA	GGGAT	GGGAC	GGGAG	GGGTA	GGGTT	GGGTC	GGGTG	GGGCA	GGGCT	GGGCC	GGGCG	GGGGA	GGGGT	GGGGC	GGGGG

- A(24.67%)
- T(22.14%)
- C(26.87%)
- G(26.31%)
- N(0.001%)
- GC(53.18%)

After filtering

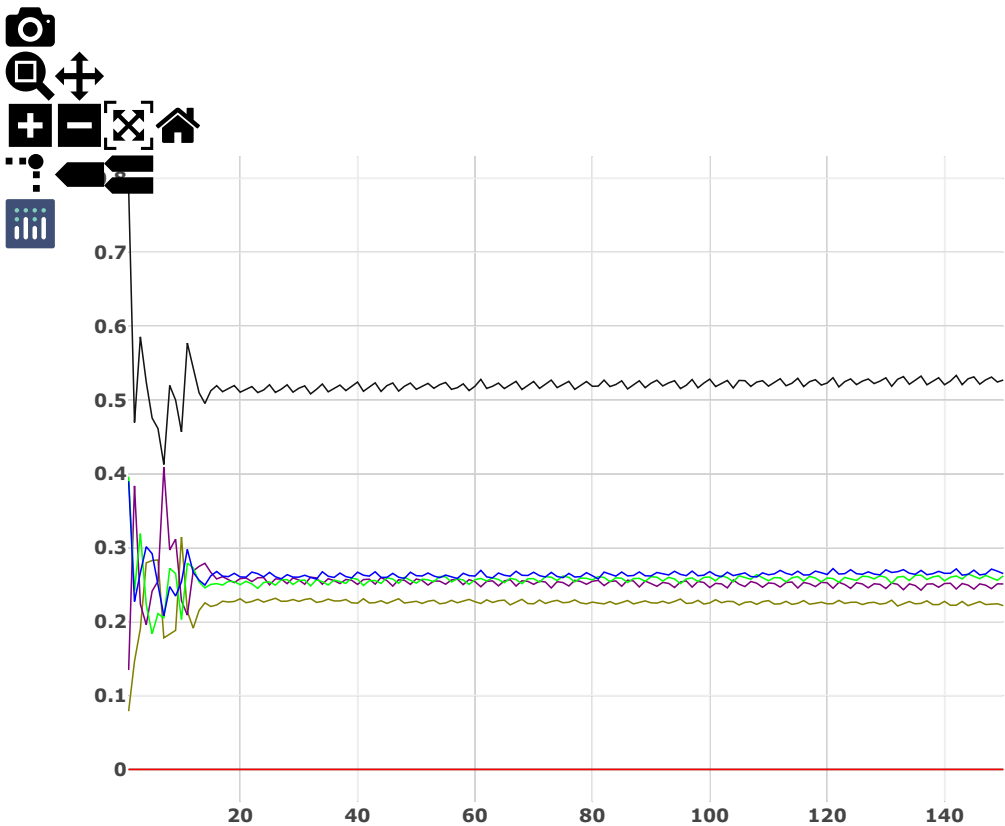
After filtering: read1: quality

Value of each position will be shown on mouse over.



After filtering: read1: base contents

Value of each position will be shown on mouse over.



After filtering: read1: KMER counting

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

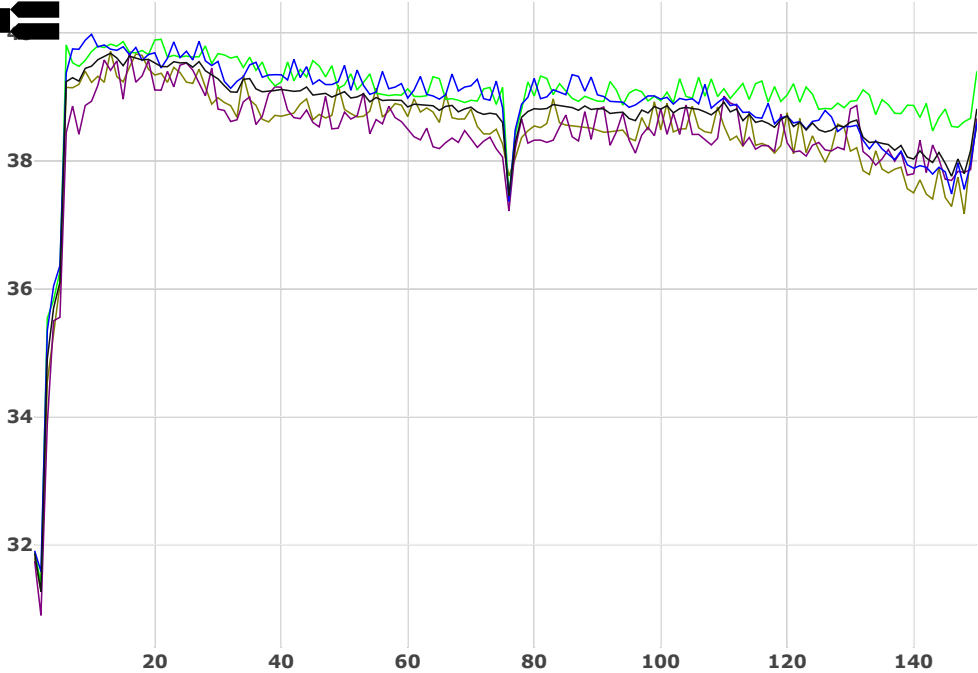
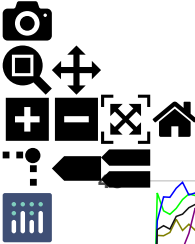
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AAT	AATAA	AATAT	AATAC	AATAG	AATTA	AATTT	AATTC	AATTG	AATCA	AATCT	AATCC	AATCG	AATGA	AATGT	AATGC	AATGG
AAC	AACAA	AACAT	AACAC	AACAG	AACTA	AAC TT	AAC TC	AAC TG	AACCA	AACCT	AACCC	AACCG	AACGA	AACGT	AACGC	AACGG
AAG	AAGAA	AAGAT	AAGAC	AAGAG	AAGTA	AAGTT	AAGTC	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
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AGT	AGTAA	AGTAT	AGTAC	AGTAG	AGTTA	AGTTT	AGTTC	AGTTG	AGTCA	AGTCT	AGTCC	AGTCG	AGTGA	AGGT	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	TAAATA	TAAATT	TAAATC	TAAATG	TAAACA	TAAACT	TAAACC	TAAACG	TAAAGA	TAAAGT	TAAAGC	TAAAGG
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	TTCCG
TTG	TTGAA	TTGAT	TTGAC	TTGAG	TTGTA	TTGTT	TTGTC	TTGTG	TTGCA	TTGCT	TTGCC	TTGCG	TTGGA	TTGGT	TTGGC	TTGGG
TCA	TCAAA	TCAAT	TCAAC	TCAG	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	TGCTT	TGCCC	TGCCG	TGCCA	TGCGT	TGCGC	TGCGG
TGG	TGAAA	TGGAT	TGGAC	TGGAG	TGGTA	TGGTT	TGGTC	TGGTG	TGGCA	TGGCT	TGGCC	TGGCG	TGGGA	TGGGT	TGGGC	TGGGG
CAA	CAAAA	CAAAAT	CAAAC	CAAG	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	CACCTA	CACCTT	CACCTC	CACCTG	CACCA	CACCT	CACCC	CACCG	CACGA	CACGT	CACGC	CACGG
CAG	CAGAA	CAGAT	CAGAC	CAGAG	CAGTA	CAGTT	CAGTC	CAGTG	CAGCA	CAGCT	CAGCC	CAGCG	CAGGA	CAGGT	CAGGC	CAGGG
CTA	CTAAA	CTAAT	CTAAC	CTAAG	CTATA	CTATT	CTATC	CTATG	CTACA	CTACT	CTACC	CTACG	CTAGA	CTAGT	CTAGC	CTAGG
CTT	CTTAA	CTTAT	CTTAC	CTTAG	CTTTA	CTTTT	CTTTC	CTTTG	CTTCA	CTTCT	CTTCC	CTTCG	CTTGA	CTTGT	CTTGC	CTTGG
CTC	CTCAA	CTCAT	CTCAC	CTCAG	CTCTA	CTCTT	CTCTC	CTCTG	CTCCA	CTCCT	CTCCC	CTCCG	CTCGA	CTCGT	CTCGC	CTCCG
CTG	CTGAA	CTGAT	CTGAC	CTGAG	CTGTA	CTGTT	CTGTC	CTGTG	CTGCA	CTGCT	CTGCC	CTGCG	CTGGA	CTGGT	CTGGC	CTGGG
CCA	CCAAA	CCAAAT	CCAAC	CCAG	CCATA	CCATT	CCATC	CCATG	CCACA	CCACT	CCACC	CCACG	CCAGA	CCAGT	CCAGC	CCAGG
CCT	CCTAA	CCTAT	CCTAC	CCTAG	CCTTA	CCTTT	CCTTC	CCTTG	CCTCA	CCTCT	CCTCC	CCTCG	CCTGA	CCTGT	CCTGC	CCTGG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	CCCTC	CCCTG	CCCCA	CCCCT	CCCCC	CCCCG	CCCGA	CCCGT	CCCGC	CCCCG
CCG	CCGAA	CCGAT	CCGAC	CCGAG	CCGTA	CCGTT	CCGTC	CCGTG	CCGCA	CCGCT	CCGCC	CCGCG	CCGGA	CCGGT	CCGGC	CCGGG
CGA	CGAAA	CGAAT	CGAAC	CGAG	CGATA	CGATT	CGATC	CGATG	CGACA	CGACT	CGACC	CGACG	CGAGA	CGAGT	CGAGC	CGAGG
CGT	CGTAA	CGTAT	CGTAC	CGTAG	CGTTA	CGTTT	CGTTC	CGTTG	CGTCA	CGCTT	CGCCC	CGCCG	CGCGA	CGCGT	CGCGC	CGCCG
CGC	CGCAA	CGCAT	CGCAC	CGCAG	CGCTA	CGCTT	CGCTC	CGCTG	CGCCA	CGCCT	CGCCC	CGCCG	CGCGA	CGCGT	CGCGC	CGCCG
CGG	CGGAA	CGGAT	CGGAC	CGGAG	CGGTA	CGGTT	CGGTC	CGGTG	CGGCA	CGGCT	CGGCC	CGGCG	CGGGA	CGGGT	CGGGC	CGGGG
GAA	GA AAA	GA AAT	GA AAC	GA AG	GA ATA	GA ATT	GA ATC	GA ATG	GA ACA	GA ACT	GA ACC	GA ACG	GA AGA	GA AGT	GA AGC	GA AGG
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	GTA AA	GTA AT	GTA AC	GTA AG	GTA TA	GTA TT	GTA TC	GTA TG	GTA CA	GTA CT	GTA CC	GTA CG	GTA GA	GTA GT	GTA GC	GTA GG
GTT	GTTAA	GTTAT	GTTAC	GTTAG	GTTTA	GTTTT	GTTTC	GTTTG	GTTCA	GTTCT	GTTCC	GTTCG	GTTGA	GTTGT	GTTGC	GTTGG
GTC	GTC AA	GTC AT	GTC AC	GTC AG	GTC TA	GTC TT	GTC TC	GTC TG	GTC CA	GTC CT	GTC CC	GTC CG	GTC GA	GTC GT	GTC GC	GTC GG
GTG	GTGAA	GTGAT	GTGAC	GTGAG	GTGTA	GTGTT	GTGTC	GTGTG	GTGCA	GTGCT	GTGCC	GTGCG	GTGGA	GTGGT	GTGGC	GTGGG
GCA	GCAAA	GCAAT	GCAAC	GCAAG	GCAT A	GCA T T	GCA T C	GCA T G	GCA C A	GCA C T	GCA C C	GCA C G	GCA G A	GCA G T	GCA G C	GCA G G
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	GGA AA	GGA AT	GGA AC	GGA AG	GGA TA	GGA TT	GGA TC	GGA TG	GGA CA	GGA CT	GGA CC	GGA CG	GGA GA	GGA GT	GGA GC	GGA GG
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	GGCCG
GGG	GGGAA	GGGAT	GGGAC	GGGAG	GGGTA	GGGTT	GGGTC	GGGTG	GGGCA	GGGCT	GGGCC	GGGCG	GGGGA	GGGGT	GGGGC	GGGGG

A(22.50%)
T(25.37%)
C(25.68%)
G(26.43%)
N(0.000%)
GC(52.11%)

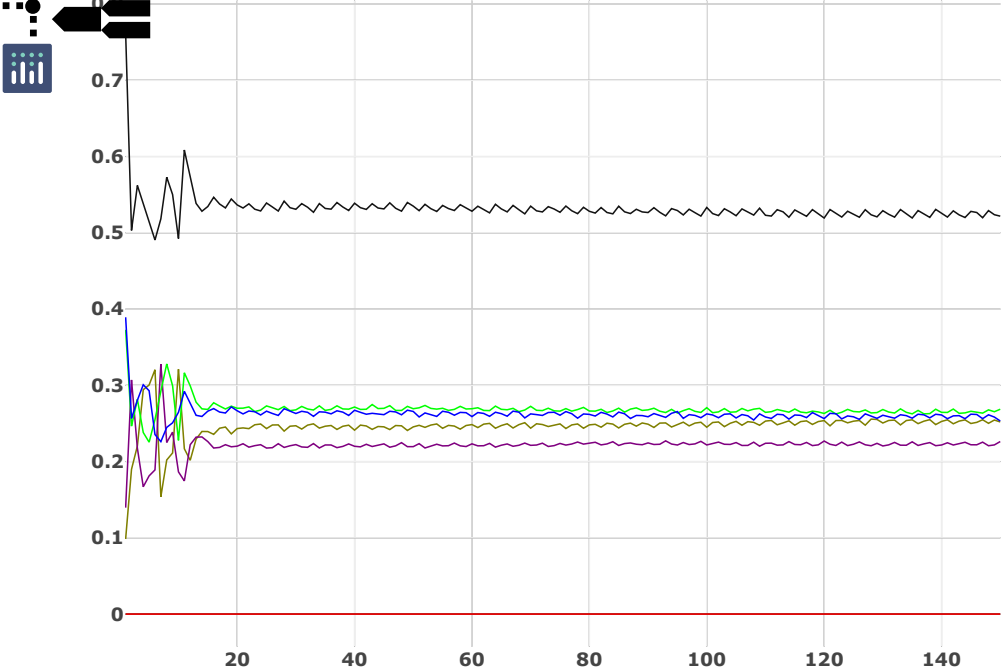
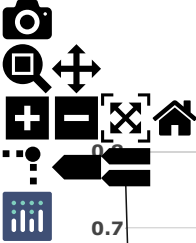
After filtering: read2: quality

Value of each position will be shown on mouse over.



After filtering: read2: base contents

Value of each position will be shown on mouse over.



After filtering: read2: KMER counting

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

	AA	AT	AC	AG	TA	TT	TC	TG	CA	CT	CC	CG	GA	GT	GC	GG
AAA	AAAA	AAAT	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	AAC TG	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	ATA TT	ATATC	ATATG	ATACA	ATACT	ATACC	ATACG	ATAGA	ATAGT	ATAGC	ATAGG
ATT	ATTAA	ATTAT	ATTAC	ATTAG	ATTTA	ATTTT	ATTT C	ATTTG	ATTCA	ATTCT	ATTC C	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	AC CCT	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	TAA TA	TAA TT	TAA TC	TAA TG	TAA CA	TAA CT	TAA CC	TAA CG	TAA GA	TAA GT	TAA GC	TAA GG
TAT	TATAA	TATAT	TATAC	TATAG	TATTA	TATTT	TATTC	TAT TG	TAT CA	TAT CT	TAT CC	TAT CG	TAT GA	TAT GT	TAT GC	TAT GG
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	TTTT C	TTTTG	TTTCA	TTTCT	TTTCC	TTTCG	TTTGA	TTTGT	TTTGC	TTTGG
TTC	TTCAA	TTCAT	TTCAC	TTCAG	TTCTA	TTCTT	TTCTC	TTCTG	TTCCA	TT CCT	TTCCC	TTCCG	TTCGA	TTCGT	TTCGC	TTCCG
TTG	TTGAA	TTGAT	TTGAC	TTGAG	TTGTA	TTGTT	TTGTC	TTGTG	TTGCA	TTGCT	TTGCC	TTGCG	TTGGA	TTGGT	TTGGC	TTGGG
TCA	TCAAA	TCAAT	TCAC	TCAG	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	TGT TT	TGT TC	TGT TG	TGT CA	TGT CT	TGT CC	TGT CG	TGT GA	TGT GT	TGT GC	TGT GG
TGC	TGCAA	TGCAT	TGCAC	TGCAG	TGCTA	TGCTT	TGCTC	TGCTG	TGCCA	TG CCT	TGCCC	TGCCG	TGCCGA	TGCCGT	TGCCC	TGCCG
TGA	TGAAA	TGAAT	TGAAC	TGAAG	TGATA	TGATT	TGATC	TGATG	TGACA	TGACT	TGACC	TGACG	TGAGA	TGAGT	TGAGC	TGAGG
TGG	TGTAA	TGTAT	TGTAC	TGTAG	TGTTA	TGT TT	TGT TC	TGT TG	TGT CA	TGT CT	TGT CC	TGT CG	TGT GA	TGT GT	TGT GC	TGT GG
TGC	TGCAA	TGCAT	TGCAC	TGCAG	TGCTA	TGCTT	TGCTC	TGCTG	TGCCA	TG CCT	TGCCC	TGCCG	TGCCGA	TGCCGT	TGCCC	TGCCG
TGA	TGAAA	TGAAT	TGAAC	TGAAG	TGATA	TGATT	TGATC	TGATG	TGACA	TGACT	TGACC	TGACG	TGAGA	TGAGT	TGAGC	TGAGG
TGG	TGTAA	TGTAT	TGTAC	TGTAG	TGTTA	TGT TT	TGT TC	TGT TG	TGT CA	TGT CT	TGT CC	TGT CG	TGT GA	TGT GT	TGT GC	TGT GG
TGC	TGCAA	TGCAT	TGCAC	TGCAG	TGCTA	TGCTT	TGCTC	TGCTG	TGCCA	TG CCT	TGCCC	TGCCG	TGCCGA	TGCCGT	TGCCC	TGCCG
TGA	TGAAA	TGAAT	TGAAC	TGAAG	TGATA	TGATT	TGATC	TGATG	TGACA	TGACT	TGACC	TGACG	TGAGA	TGAGT	TGAGC	TGAGG
CAA	CAAAA	CA AAT	CA A AC	CA A AG	CA A TA	CA A TT	CA A TC	CA A TG	CA A CA	CA A CT	CA A CC	CA A CG	CA A GA	CA A GT	CA A GC	CA A GG
CAT	CATAA	CATAT	CATAC	CATAG	CATTA	CATTT	CATTC	CAT TG	CAT CA	CAT CT	CAT CC	CAT CG	CAT GA	CAT GT	CAT GC	CAT GG
CAC	CACAA	CACAT	CACAC	CACAG	CAC TA	CAC TT	CAC TC	CAC TG	CAC CA	CAC CT	CAC CC	CAC CG	CAC GA	CAC GT	CAC GC	CAC GG
CAG	CAGAA	CAGAT	CAGAC	CAGAG	CAG TA	CAG TT	CAG TC	CAG TG	CAG CA	CAG CT	CAG CC	CAG CG	CAG GA	CAG GT	CAG GC	CAG GG
CTA	CTAAA	CT AAT	CT A AC	CT A AG	CT A TA	CT A TT	CT A TC	CT A TG	CT A CA	CT A CT	CT A CC	CT A CG	CT A GA	CT A GT	CT A GC	CT A GG
CTT	CTTAA	CTTAT	CTTAC	CTTAG	CTTTA	CTTTT	CTTTC	CTT TG	CTT CA	CTT CT	CTT CC	CTT CG	CTT GA	CTT GT	CTT GC	CTT GG
CTC	CTCAA	CTCAT	CTCAC	CTCAG	CTCTA	CTCTT	CTCTC	CTCTG	CTCCA	CT CCT	CTCCC	CTCCG	CTCGA	CTCGT	CTCGC	CTCCG
CTG	CTGAA	CTGAT	CTGAC	CTGAG	CTGTA	CTGTT	CTGTC	CTGTG	CTGCA	CTGCT	CTGCC	CTGCG	CTGGA	CTGGT	CTGGC	CTGGG
CCA	CCAAA	CC AAT	CC A AC	CC A AG	CC A TA	CC A TT	CC A TC	CC A TG	CC A CA	CC A CT	CC A CC	CC A CG	CC A GA	CC A GT	CC A GC	CC A GG
CCT	CCTAA	CCTAT	CCTAC	CCTAG	CCTTA	CCTTT	CCTTC	CCT TG	CCT CA	CCT CT	CCT CC	CCT CG	CCT GA	CCT GT	CCT GC	CCT GG
CCC	CCCAA	CCCAT	CCCAC	CCCAG	CCCTA	CCCTT	CCCTC	CCCTG	CCCCA	CC CCT	CCCCC	CCCCG	CCCGA	CCCGT	CCCGC	CCCCG
CCG	CCGAA	CCGAT	CCGAC	CCGAG	CCG TA	CCG TT	CCG TC	CCG TG	CCG CA	CCG CT	CCG CC	CCG CG	CCG GA	CCG GT	CCG GC	CCG GG
CGA	CGAAA	CG AAT	CG A AC	CG A AG	CG A TA	CG A TT	CG A TC	CG A TG	CG A CA	CG A CT	CG A CC	CG A CG	CG A GA	CG A GT	CG A GC	CG A GG
CGT	CGTAA	CGTAT	CGTAC	CGTAG	CGTTA	CGTTT	CGTTC	CGT TG	CGT CA	CGT CT	CGT CC	CGT CG	CGT GA	CGT GT	CGT GC	CGT GG
CGC	CGCAA	CGCAT	CGCAC	CGCAG	CGCTA	CGCTT	CGCTC	CGCTG	CGCCA	CG CCT	CGCCC	CGCCG	CGCGA	CGCGT	CGCGC	CGCCG
CGG	CGGAA	CGGAT	CGGAC	CGGAG	CGG TA	CGG TT	CGG TC	CGG TG	CGG CA	CGG CT	CGGCC	CGGCG	CGGGA	CGGGT	CGGGC	CGGGG
GAA	GAAAA	G A AAT	G A A AC	G A A AG	G A A TA	G A A TT	G A A TC	G A A TG	G A A CA	G A A CT	G A A CC	G A A CG	G A A GA	G A A GT	G A A GC	G A A GG
GAT	GATAA	GATAT	GATAC	GATAG	GATTA	GATTT	GATTC	GAT TG	GAT CA	GAT CT	GAT CC	GAT CG	GAT GA	GAT GT	GAT GC	GAT GG
GAC	GACAA	GACAT	GACAC	GACAG	GAC TA	GAC TT	GAC TC	GAC TG	GAC CA	GAC CT	GAC CC	GAC CG	GAC GA	GAC GT	GAC GC	GAC GG
GAG	GAGAA	GAGAT	GAGAC	GAGAG	GAG TA	GAG TT	GAG TC	GAG TG	GAG CA	GAG CT	GAG CC	GAG CG	GAG GA	GAG GT	GAG GC	GAG GG
GTA	GTA AA	GTAAT	GTAAC	GTAAG	GTA TA	GTA TT	GTA TC	GTA TG	GTA CA	GTA CT	GTA CC	GTA CG	GTA GA	GTA GT	GTA GC	GTA GG
GTT	GTTAA	GTTAT	GTTAC	GTTAG	GTTTA	GTTTT	GTTTC	GTT TG	GTT CA	GTT CT	GTT CC	GTT CG	GTT GA	GTT GT	GTT GC	GTT GG
GTC	GTC AA	GTCAT	GTCAC	GTCAG	GTC TA	GTC TT	GTC TC	GTC TG	GTC CA	GTC CT	GTC CC	GTC CG	GTC GA	GTC GT	GTC GC	GTC GG
GTG	GTCAA	GTGAT	GTGAC	GTGAG	GTG TA	GTG TT	GTG TC	GTG TG	GTG CA	GTG CT	GTGCC	GTGCG	GTGGA	GTGGT	GTGGC	GTGGG
GCA	GCAAA	GCAAT	GCAAC	GCAAG	GCA TA	GCA TT	GCA TC	GCA TG	GCA CA	GCA CT	GCA CC	GCA CG	GCA GA	GCA GT	GCA GC	GCA GG
GCT	GCTAA	GCTAT	GCTAC	GCTAG	GCTTA	GCTTT	GCTTC	GCT TG	GCT CA	GCT CT	GCT CC	GCT CG	GCT GA	GCT GT	GCT GC	GCT GG
GCC	GCCAA	GCCAT	GCCAC	GCCAG	GCC TA	GCC TT	GCC TC	GCC TG	GCC CA	GCC CT	GCC CC	GCC CG	GCC GA	GCC GT	GCC GC	GCC GG
GCG	GCGAA	GCGAT	GCGAC	GCGAG	GCG TA	GCG TT	GCG TC	GCG TG	GCG CA	GCG CT	GCG CC	GCG CG	GCG GA	GCG GT	GCG GC	GCG GG
GGA	GGA AA	GGAAT	GGAAC	GGAAG	GGA TA	GGA TT	GGA TC	GGA TG	GGA CA	GGA CT	GGA CC	GGA CG	GGA GA	GGA GT	GGA GC	GGA GG
GGT	GGTAA	GGTAT	GGTAC	GGTAG	GGT TA	GGT TT	GGT TC	GGT TG	GGT CA	GGT CT	GGT CC	GGT CG	GGT GA	GGT GT	GGT GC	GGT GG
GGC	GGCAA	GGCAT	GGCAC	GGCAG	GGCTA	GGCTT	GGCTC	GGCTG	GGCCA	GG CCT	GGCCC	GGCCG	GGCGA	GGCGT	GGCGC	GGCCG
GGG	GGGAA	GGGAT	GGGAC	GGGAG	GGG TA	GGG TT	GGG TC	GGG TG	GGG CA	GGG CT	GGGCC	GGGCG	GGGGA	GGGGT	GGGGC	GGGGG

- A(24.63%)
- T(22.17%)
- C(26.90%)
- G(26.28%)
- N(0.000%)
- GC(53.19%)


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fastp 0.20.0, at 2022-01-03 05:19:07