

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 11:54:06

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/KP070.sorted.bam.ba
m -nw 400 -hm 3
```

1.2. Alignment

Command line:	bwa mem -M /home/vdp5/data/salvador_vivax_asia_2016/first-SAMEA2376790/pvivax_sal1_SAMEA2376790.fasta /home/vdp5/data/cambodia_samples/sequences_gz/KP070-BiooBarcode_29_CAACTA_R2.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/KP070-BiooBarcode_29_CAACTA_R1.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 11:54:06 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/KP070.sorted.bam.b

am

2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	20,342,248
Mapped reads	7,983,298 / 39.24%
Unmapped reads	12,358,950 / 60.76%
Mapped paired reads	7,983,298 / 39.24%
Mapped reads, first in pair	3,969,262 / 19.51%
Mapped reads, second in pair	4,014,036 / 19.73%
Mapped reads, both in pair	7,740,834 / 38.05%
Mapped reads, singletons	242,464 / 1.19%
Read min/max/mean length	30 / 100 / 99.92
Duplicated reads (estimated)	4,416,096 / 21.71%
Duplication rate	56.47%
Clipped reads	917,308 / 4.51%

2.2. ACGT Content

Number/percentage of A's	222,354,230 / 29.06%
Number/percentage of C's	159,894,971 / 20.9%
Number/percentage of T's	223,175,058 / 29.17%
Number/percentage of G's	159,775,640 / 20.88%
Number/percentage of N's	62,224 / 0.01%
GC Percentage	41.78%

2.3. Coverage

Mean	31.9719
Standard Deviation	32.4335

2.4. Mapping Quality

Mean Mapping Quality	58.57
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2.5. Insert size

Mean	992.27
Standard Deviation	29,396.13
P25/Median/P75	297 / 385 / 471

2.6. Mismatches and indels

General error rate	1.15%
Mismatches	8,283,674
Insertions	203,269
Mapped reads with at least one insertion	2.41%
Deletions	264,648
Mapped reads with at least one deletion	3.14%
Homopolymer indels	63.29%

2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

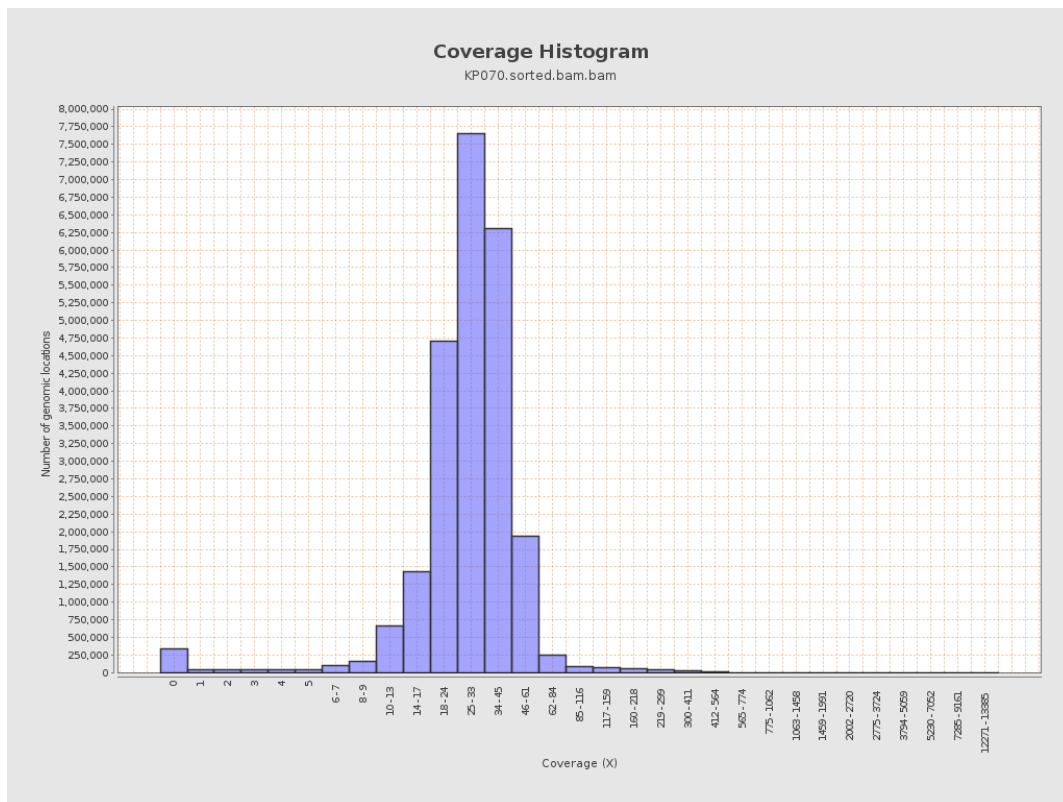
gi 1074120478 emb LT615256.1	977217	28791050	29.4623	16.0146
gi 1074120682 emb LT615257.1	860454	26343005	30.6152	21.4548
gi 1074120865 emb LT615258.1	989719	35603006	35.9728	41.1053
gi 1074121086 emb LT615259.1	935450	33197042	35.4878	47.0189
gi 1074121301 emb LT615260.1	1432239	46873907	32.7277	26.1318
gi 1074121615 emb LT615261.1	1080962	35400836	32.7494	26.6757
gi 1074121871 emb LT615262.1	1545099	47433146	30.6991	11.8843
gi 1074122235 emb LT615263.1	1585108	50208542	31.6752	25.6641
gi 1074122590 emb LT615264.1	2122358	65923341	31.0614	49.9102
gi 1074123050 emb LT615265.1	1754192	52961596	30.1914	42.8759
gi 1074123421 emb LT615	2150147	72939318	33.9229	48.4988

266.1				
gi 107412389 8 emb LT615 267.1	3031036	95755121	31.5915	20.565
gi 107412458 8 emb LT615 268.1	2359348	74973986	31.7774	32.4154
gi 107412506 5 emb LT615 269.1	3135668	99610356	31.7669	11.5956

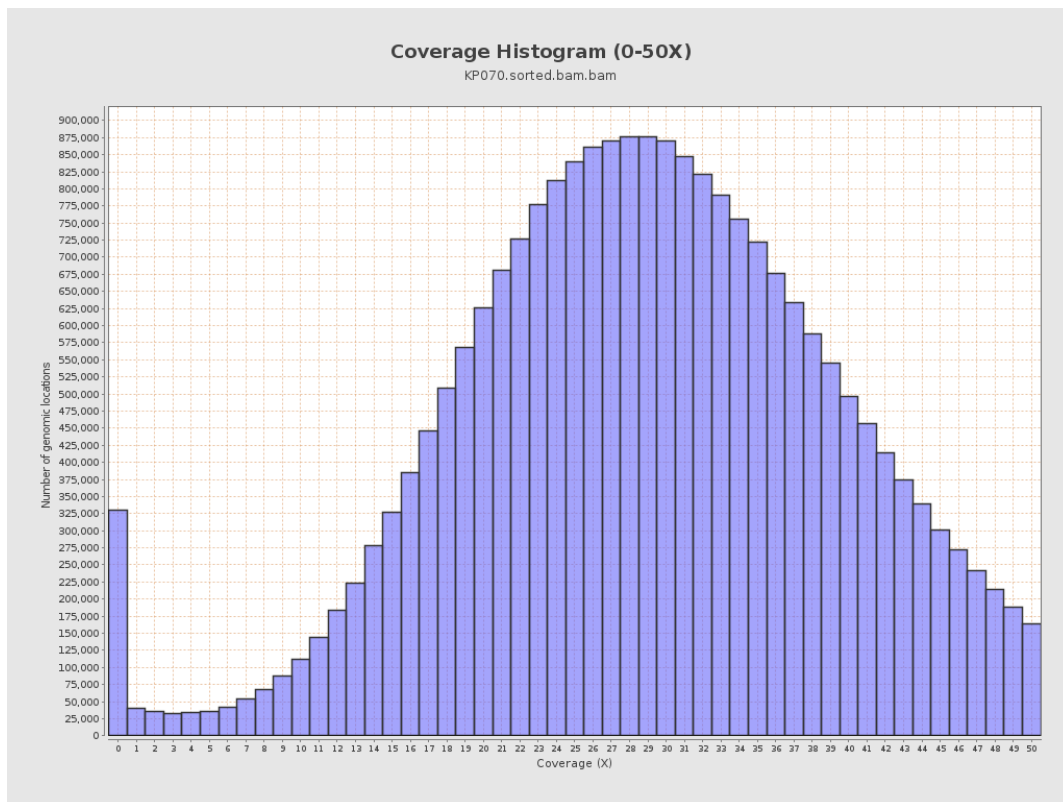
3. Results : Coverage across reference



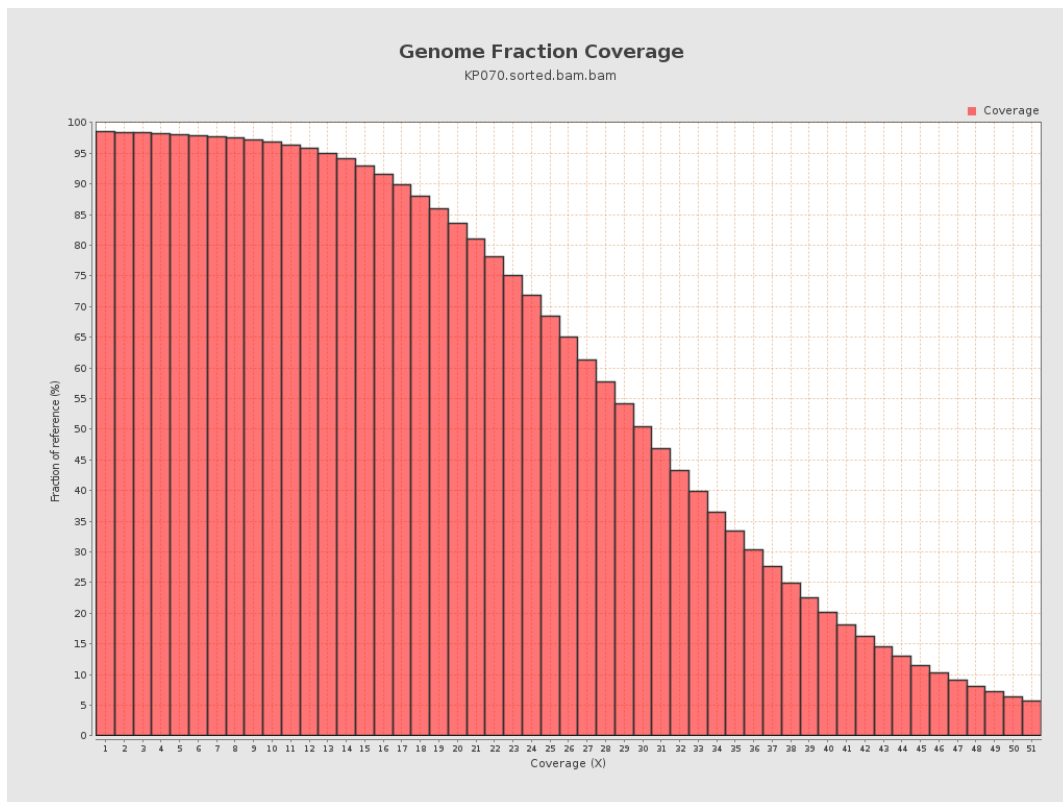
4. Results : Coverage Histogram



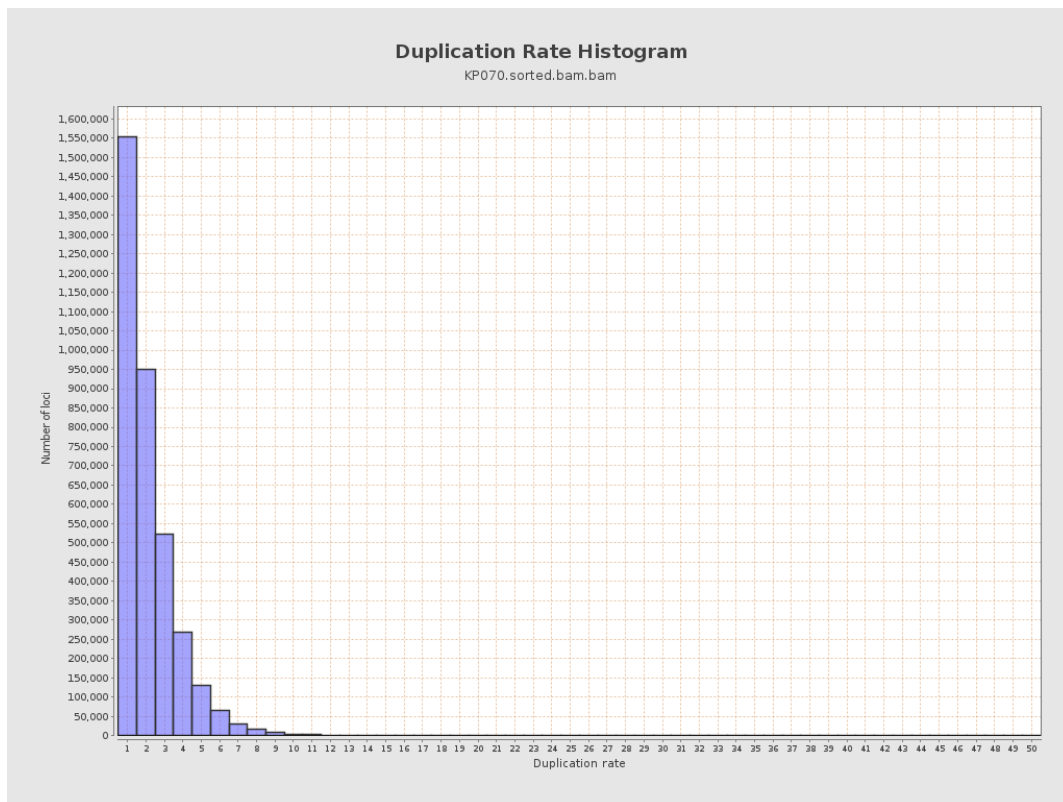
5. Results : Coverage Histogram (0-50X)



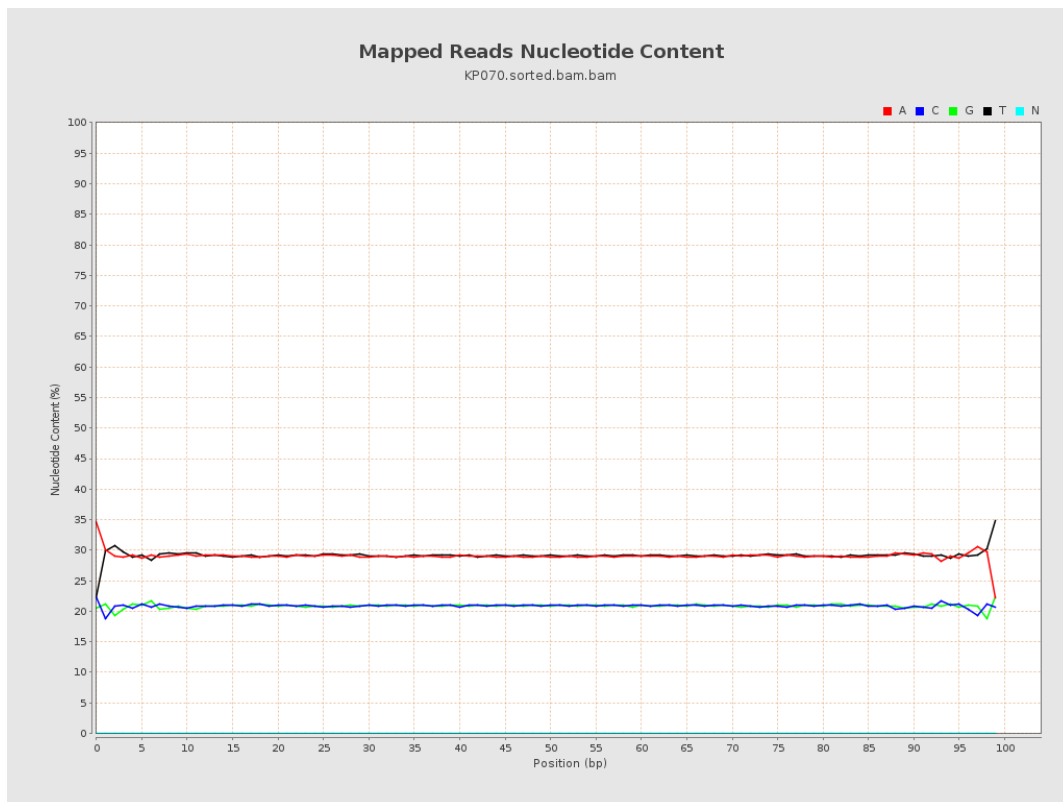
6. Results : Genome Fraction Coverage



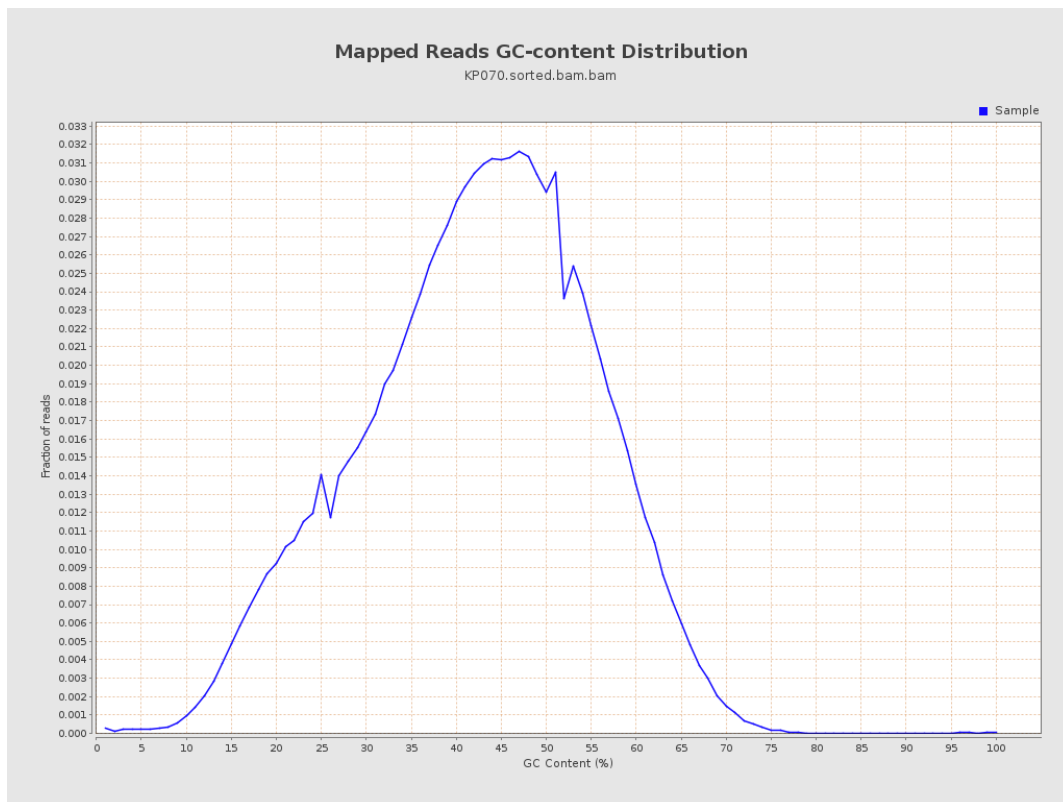
7. Results : Duplication Rate Histogram



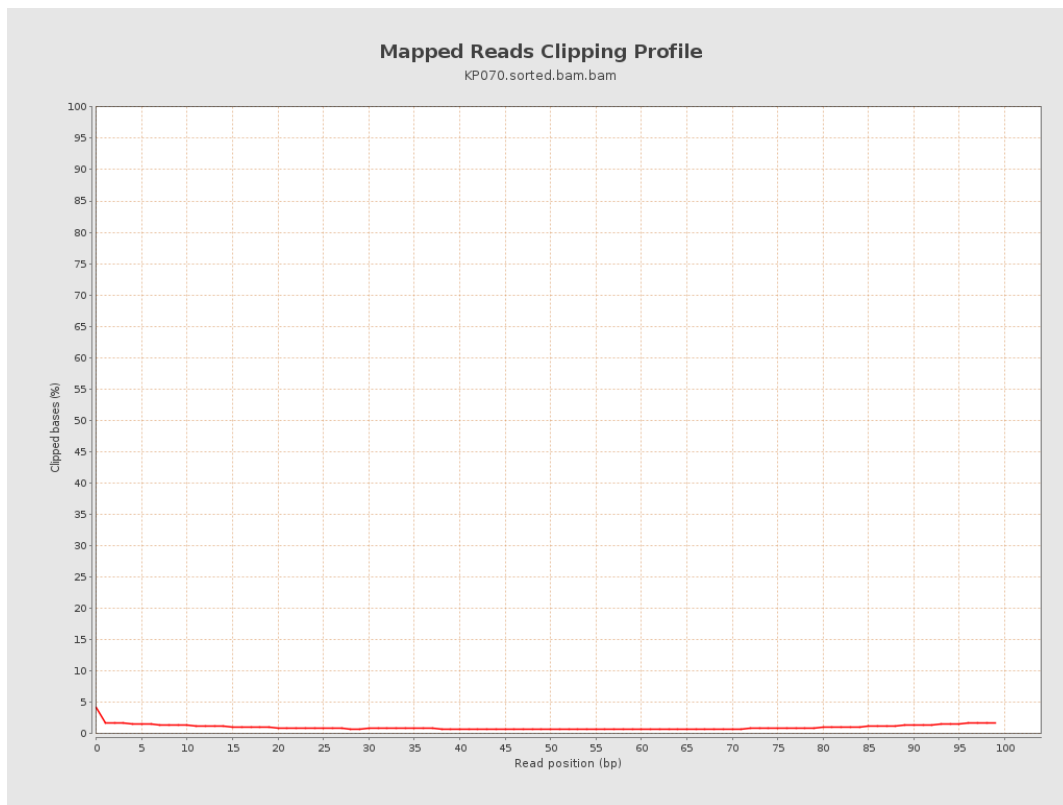
8. Results : Mapped Reads Nucleotide Content



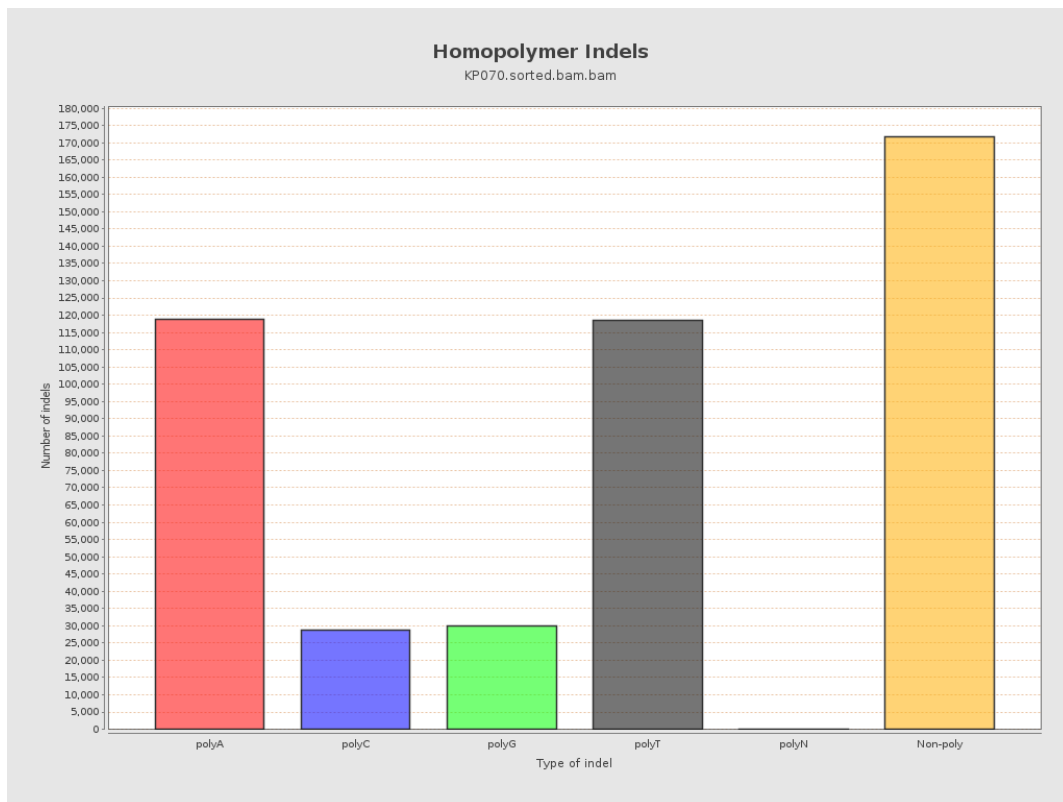
9. Results : Mapped Reads GC-content Distribution



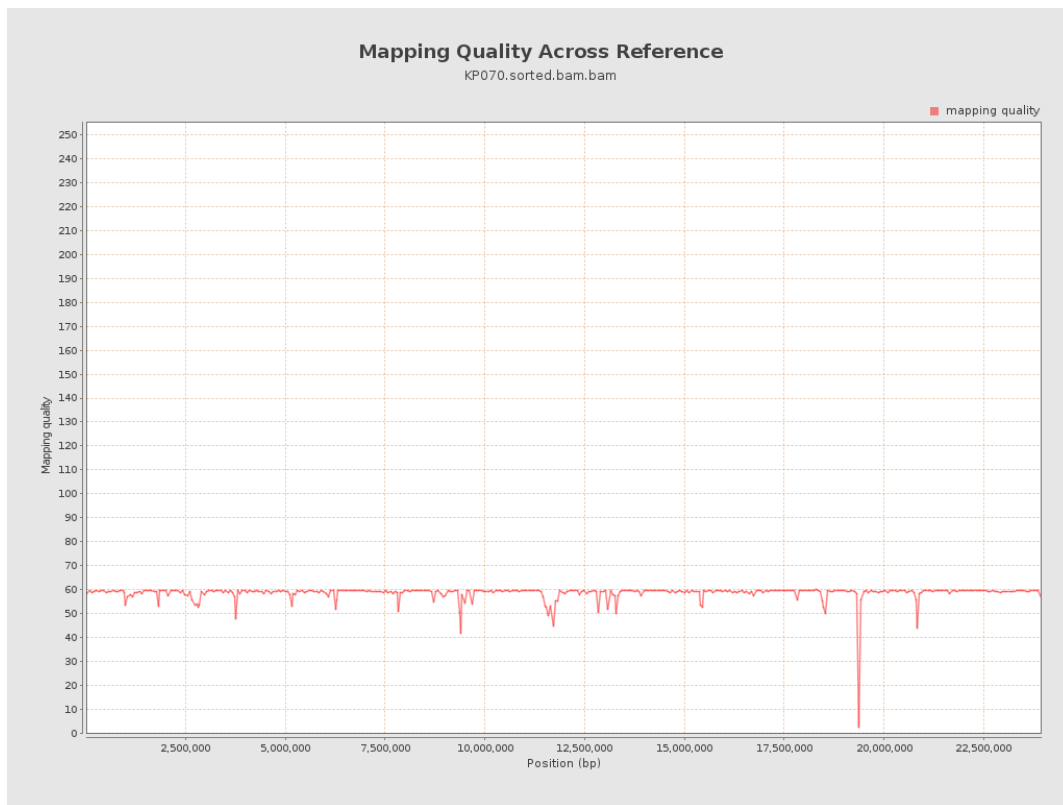
10. Results : Mapped Reads Clipping Profile



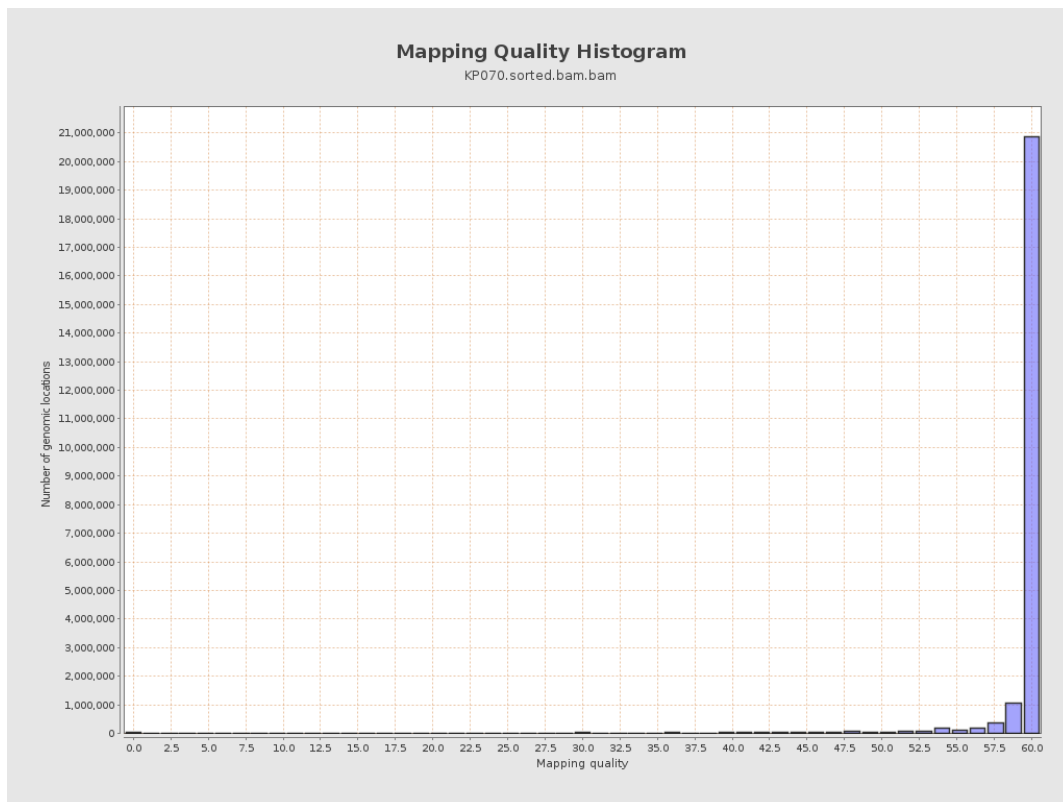
11. Results : Homopolymer Indels



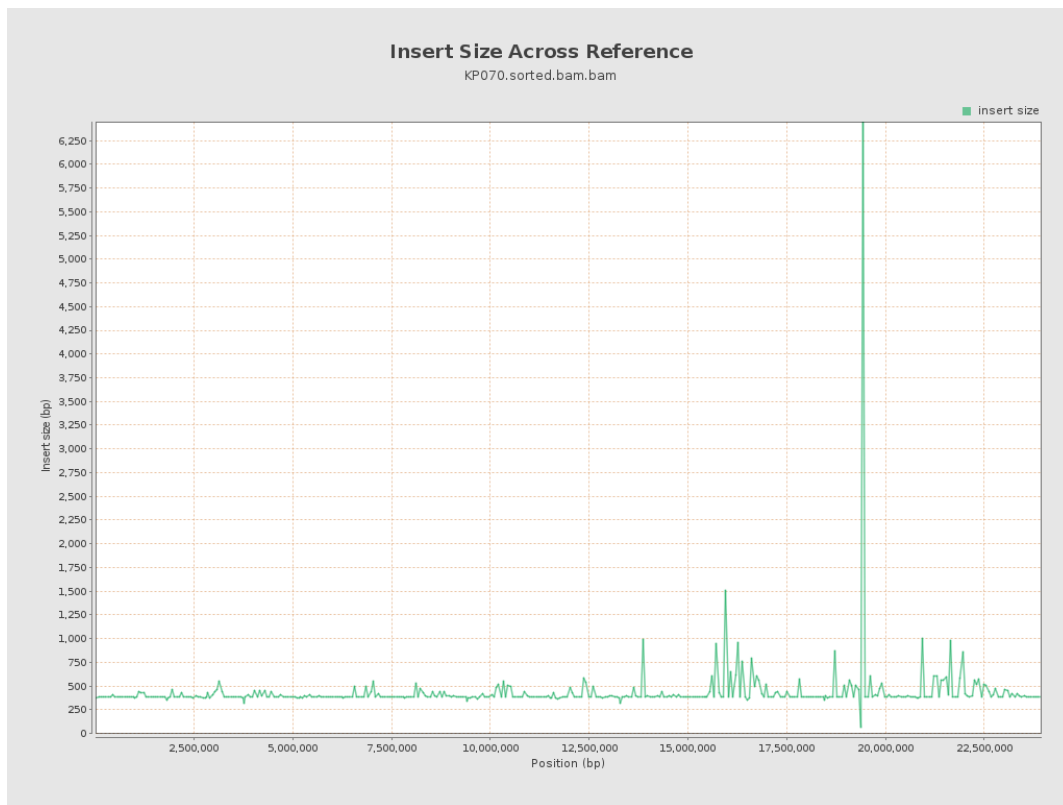
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

