Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2023/05/29 21:37:18



1. Input data & parameters

1.1. QualiMap command line

qualimap bamqc -bam /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/141 8 .nodup.bam -nw 400 -hm 3

1.2. Alignment

| BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 1418 .nodup.bam |
|---------------------------------------|---|
| Program: | bwa (0.7.17-r1188) |
| Analyze overlapping paired-end reads: | no |
| Command line: | bwa mem -M -t 8 -R @RG\tID:\unit\tPL:IIIumina\tLB:LibA\t SM:\unit\tPL:IIIumina\tLB:LibA\t SM:\unit\tPL:IIIumina\tLB:LibA\t SM:\unit\tPL:IIIumina\tLB:LibA\t SM:\unit\tPL:IIIumina\tLB:LibA\t SM:\unit\text{sample} /proj/uppstore2018210/Aalpina/data/r eference/GCA_900128785.1_MPIPZ. v5_genomic.fa /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_564/02- FASTQ/220906_A00187_0838_AHM G3KDSX3/P26207/P26207_564/02- FASTQ/220906_A00187_0838_AHM G3KDSX3/P26207_564_S131_L004 _R2_001.fastq.gz |
| Size of a homopolymer: | 3 |
| | |



| Number of windows: | 400 |
|----------------------------|-------------------------------|
| Analysis date: | Mon May 29 21:37:17 CEST 2023 |
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |



2. Summary

2.1. Globals

| Reference size | 311,642,060 |
|------------------------------|---------------------|
| Number of reads | 82,266,398 |
| Mapped reads | 78,300,597 / 95.18% |
| Unmapped reads | 3,965,801 / 4.82% |
| Mapped paired reads | 78,300,597 / 95.18% |
| Mapped reads, first in pair | 39,249,536 / 47.71% |
| Mapped reads, second in pair | 39,051,061 / 47.47% |
| Mapped reads, both in pair | 76,964,830 / 93.56% |
| Mapped reads, singletons | 1,335,767 / 1.62% |
| Read min/max/mean length | 30 / 151 / 148.08 |
| Duplicated reads (flagged) | 11,950,547 / 14.53% |
| Clipped reads | 18,199,433 / 22.12% |

2.2. ACGT Content

| Number/percentage of A's | 3,346,117,818 / 30.84% | |
|--------------------------|------------------------|--|
| Number/percentage of C's | 2,080,114,878 / 19.17% | |
| Number/percentage of T's | 3,351,147,811 / 30.88% | |
| Number/percentage of G's | 2,073,467,303 / 19.11% | |
| Number/percentage of N's | 82,037 / 0% | |
| GC Percentage | 38.28% | |

2.3. Coverage



| Mean | 34.9094 |
|--------------------|----------|
| Standard Deviation | 282.2885 |

2.4. Mapping Quality

| Mean Mapping Quality | 43.84 |
|----------------------|-------|

2.5. Insert size

| Mean | 210,075.31 |
|--------------------|-----------------|
| Standard Deviation | 2,164,033.79 |
| P25/Median/P75 | 302 / 398 / 516 |

2.6. Mismatches and indels

| General error rate | 2.49% |
|--|-------------|
| Mismatches | 250,662,932 |
| Insertions | 7,219,050 |
| Mapped reads with at least one insertion | 8.3% |
| Deletions | 7,512,174 |
| Mapped reads with at least one deletion | 8.5% |
| Homopolymer indels | 55.54% |

2.7. Chromosome stats

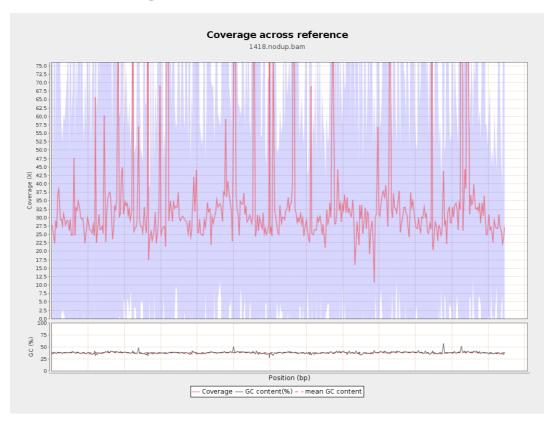
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|------------------|--------------------|
| LT669788.1 | 29724344 | 863191342 | 29.0399 | 100.7727 |



| LT669789.1 | 36598175 | 1301383999 | 35.5587 | 312.8611 |
|------------|----------|------------|---------|----------|
| LT669790.1 | 30422129 | 1087378673 | 35.743 | 241.0187 |
| LT669791.1 | 52758100 | 1812931417 | 34.3631 | 263.0038 |
| LT669792.1 | 28376109 | 978424391 | 34.4806 | 308.651 |
| LT669793.1 | 33388210 | 1078730916 | 32.3087 | 148.2384 |
| LT669794.1 | 50579949 | 1704773480 | 33.7045 | 271.5706 |
| LT669795.1 | 49795044 | 2052425350 | 41.2175 | 409.8013 |

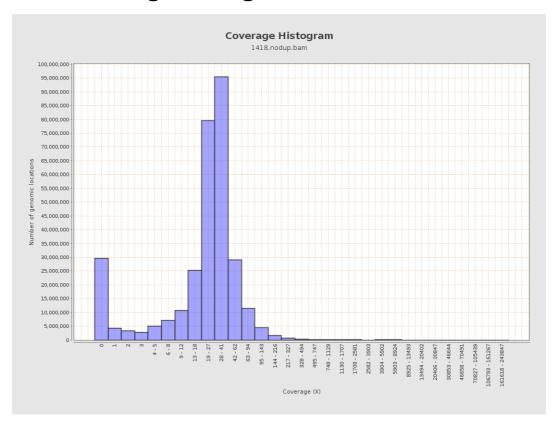


3. Results: Coverage across reference



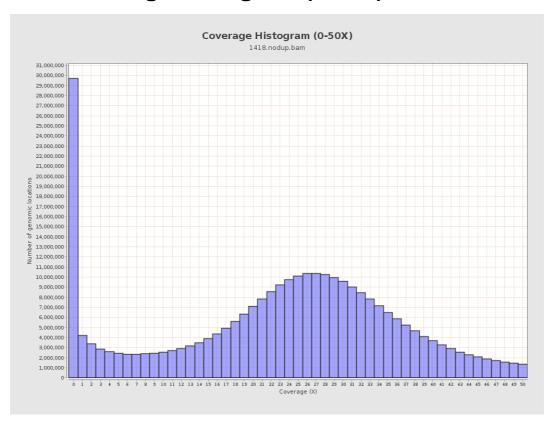


4. Results: Coverage Histogram



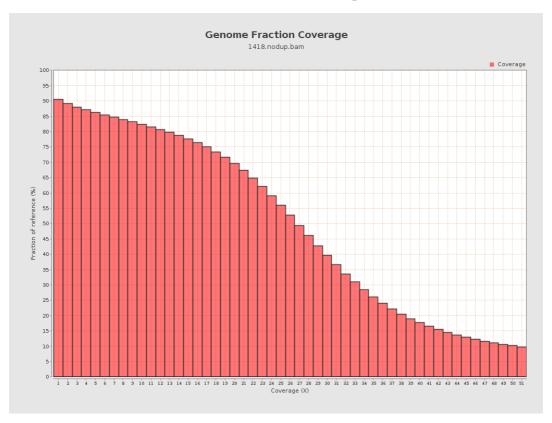


5. Results: Coverage Histogram (0-50X)



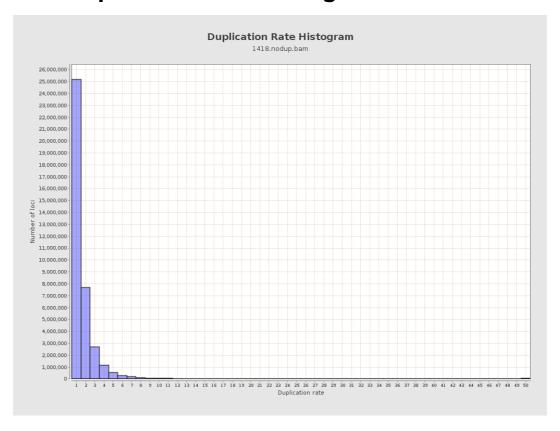


6. Results : Genome Fraction Coverage



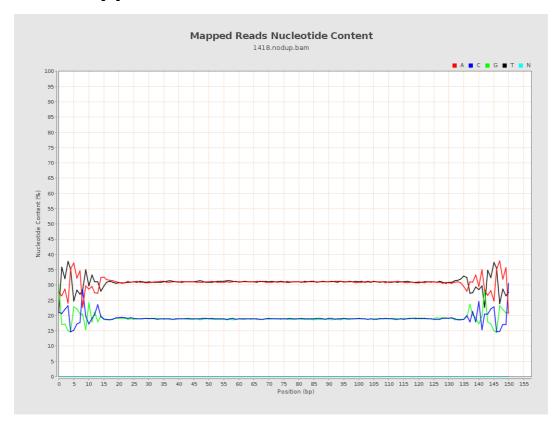


7. Results: Duplication Rate Histogram



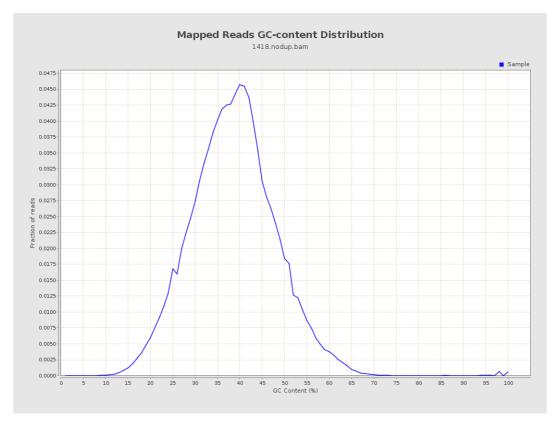


8. Results: Mapped Reads Nucleotide Content



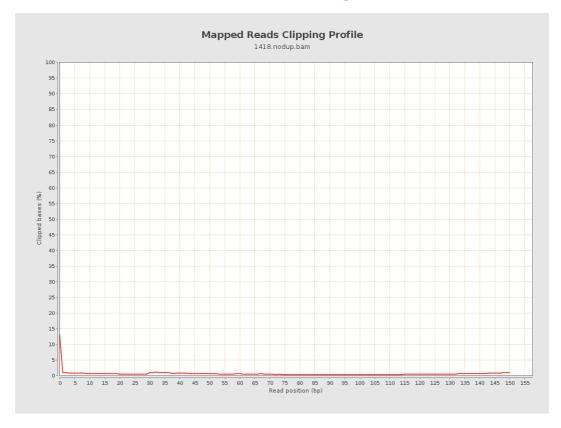


9. Results: Mapped Reads GC-content Distribution



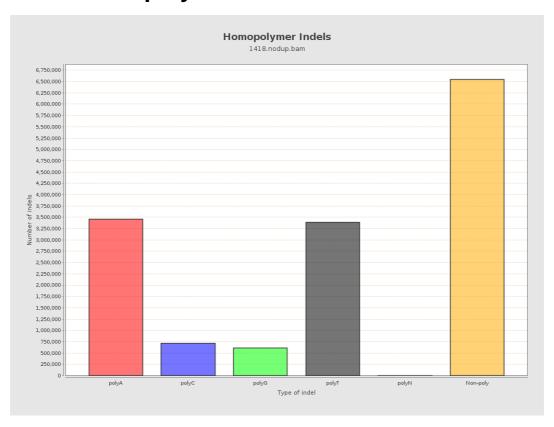


10. Results: Mapped Reads Clipping Profile





11. Results: Homopolymer Indels



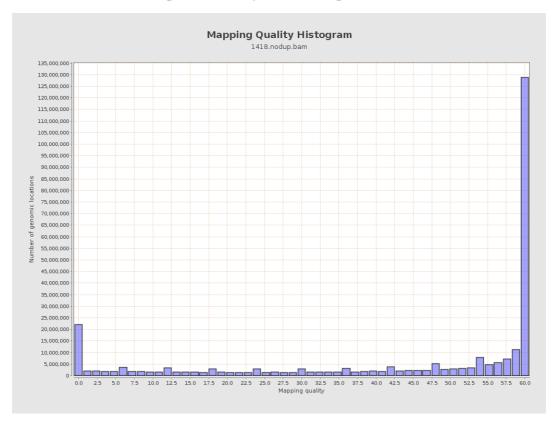


12. Results: Mapping Quality Across Reference



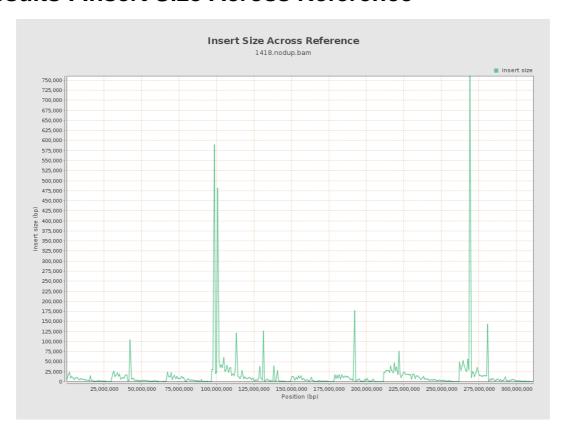


13. Results: Mapping Quality Histogram





14. Results: Insert Size Across Reference





15. Results: Insert Size Histogram

