Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2023/05/29 21:26:22



1. Input data & parameters

1.1. QualiMap command line

qualimap bamqc -bam /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/136 4 .nodup.bam -nw 400 -hm 3

1.2. Alignment

| BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 1364 .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:\$sample /proj/uppstore2018210/Aalpina/data/r eference/GCA_900128785.1_MPIPZ. v5_genomic.fa /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_406/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_406_S381_L004 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_406/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_406_S381_L004 _R2_001.fastq.gz |
| Size of a homopolymer: | 3 |



| Number of windows: | 400 |
|----------------------------|-------------------------------|
| Analysis date: | Mon May 29 21:26:21 CEST 2023 |
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |



2. Summary

2.1. Globals

| Reference size | 311,642,060 |
|------------------------------|---------------------|
| Number of reads | 51,996,587 |
| Mapped reads | 48,311,459 / 92.91% |
| Unmapped reads | 3,685,128 / 7.09% |
| Mapped paired reads | 48,311,459 / 92.91% |
| Mapped reads, first in pair | 24,200,376 / 46.54% |
| Mapped reads, second in pair | 24,111,083 / 46.37% |
| Mapped reads, both in pair | 47,112,727 / 90.61% |
| Mapped reads, singletons | 1,198,732 / 2.31% |
| Read min/max/mean length | 30 / 151 / 148.11 |
| Duplicated reads (flagged) | 6,981,860 / 13.43% |
| Clipped reads | 10,775,001 / 20.72% |

2.2. ACGT Content

| Number/percentage of A's | 2,068,683,907 / 30.9% | | |
|--------------------------|------------------------|--|--|
| Number/percentage of C's | 1,277,928,804 / 19.09% | | |
| Number/percentage of T's | 2,072,559,224 / 30.96% | | |
| Number/percentage of G's | 1,274,595,282 / 19.04% | | |
| Number/percentage of N's | 23,077 / 0% | | |
| GC Percentage | 38.13% | | |

2.3. Coverage



| Mean | 21.536 |
|--------------------|----------|
| Standard Deviation | 168.0473 |

2.4. Mapping Quality

| Mean Mapping Quality | 43.82 |
|----------------------|-------|
| mean mapping again, | 10102 |

2.5. Insert size

| Mean | 259,569.12 | |
|--------------------|-----------------|--|
| Standard Deviation | 2,441,689.62 | |
| P25/Median/P75 | 361 / 469 / 605 | |

2.6. Mismatches and indels

| General error rate | 2.34% |
|--|-------------|
| Mismatches | 143,518,573 |
| Insertions | 4,674,283 |
| Mapped reads with at least one insertion | 8.67% |
| Deletions | 4,676,946 |
| Mapped reads with at least one deletion | 8.57% |
| Homopolymer indels | 56.54% |

2.7. Chromosome stats

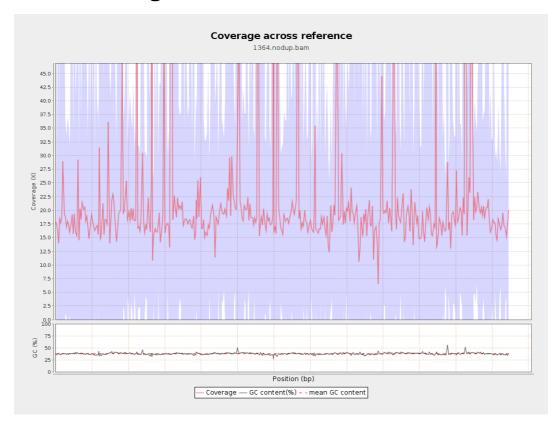
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|------------------|--------------------|
| LT669788.1 | 29724344 | 541993922 | 18.234 | 58.7294 |



| LT669789.1 | 36598175 | 796109116 | 21.7527 | 181.0022 |
|------------|----------|------------|---------|----------|
| LT669790.1 | 30422129 | 729712289 | 23.9862 | 198.2748 |
| LT669791.1 | 52758100 | 1121451296 | 21.2565 | 162.6502 |
| LT669792.1 | 28376109 | 617014328 | 21.7441 | 203.0626 |
| LT669793.1 | 33388210 | 666246713 | 19.9546 | 116.0844 |
| LT669794.1 | 50579949 | 1020709720 | 20.1801 | 141.99 |
| LT669795.1 | 49795044 | 1218300030 | 24.4663 | 213.3523 |

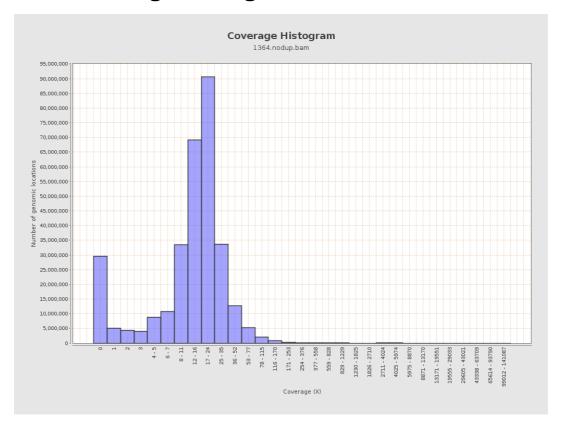


3. Results: Coverage across reference



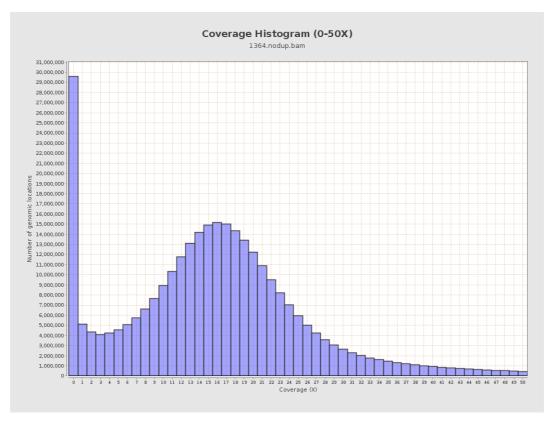


4. Results: Coverage Histogram



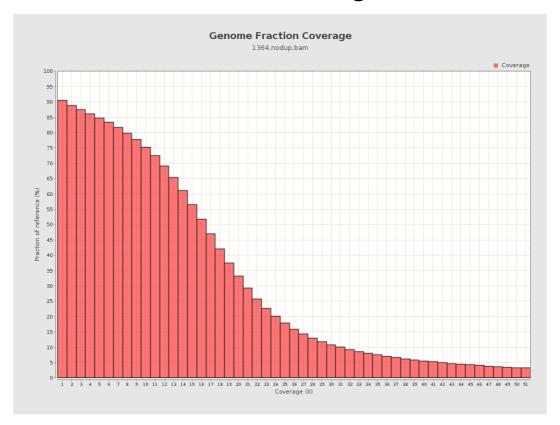


5. Results: Coverage Histogram (0-50X)



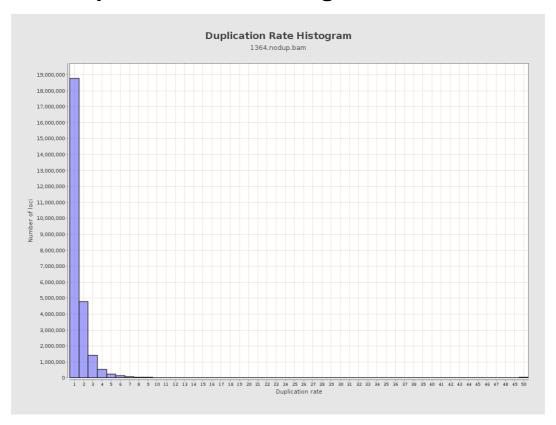


6. Results : Genome Fraction Coverage





7. Results : Duplication Rate Histogram



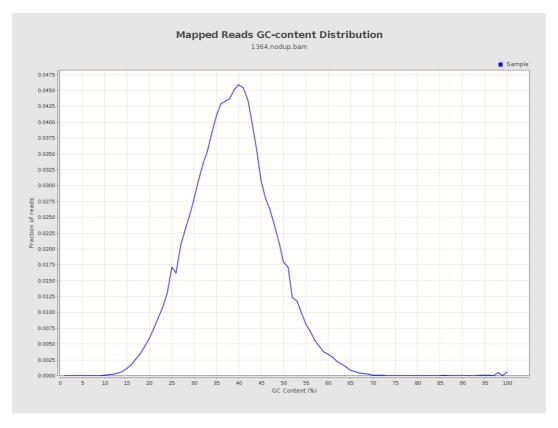


8. Results: Mapped Reads Nucleotide Content



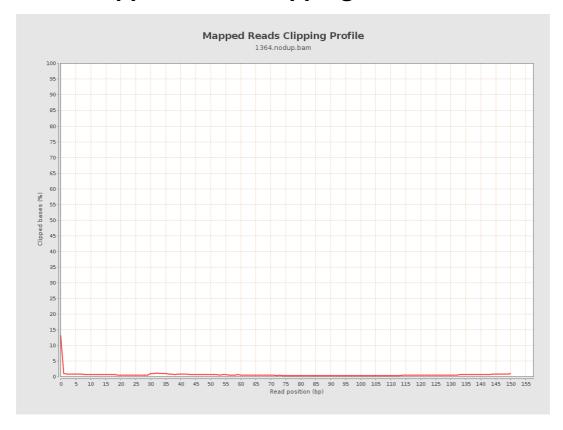


9. Results: Mapped Reads GC-content Distribution



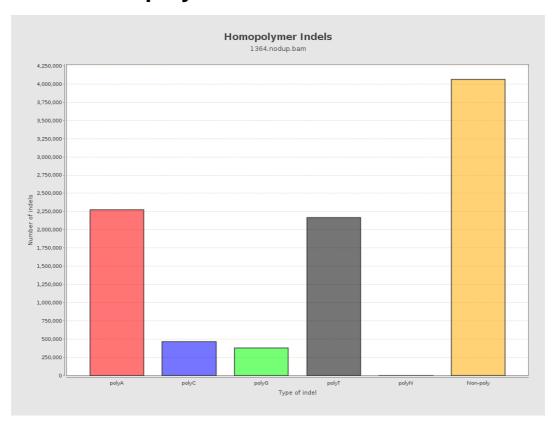


10. Results: Mapped Reads Clipping Profile



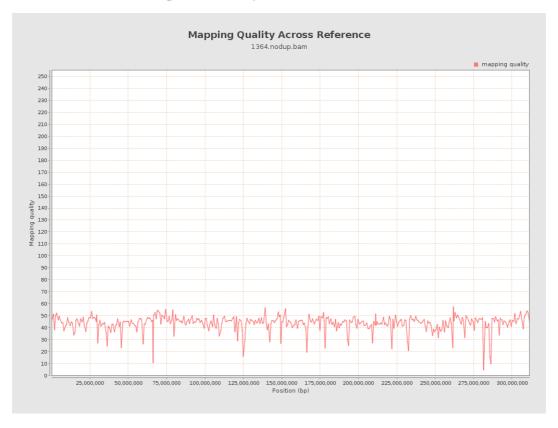


11. Results : Homopolymer Indels



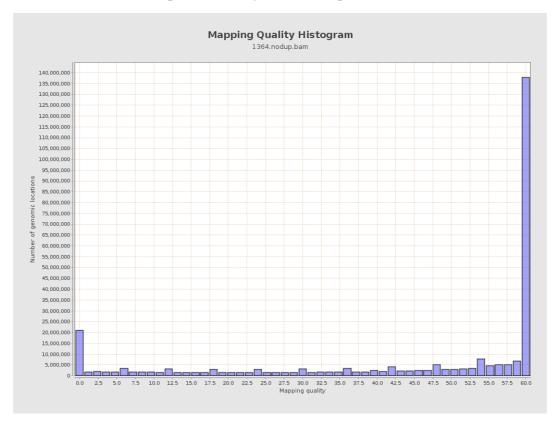


12. Results: Mapping Quality Across Reference



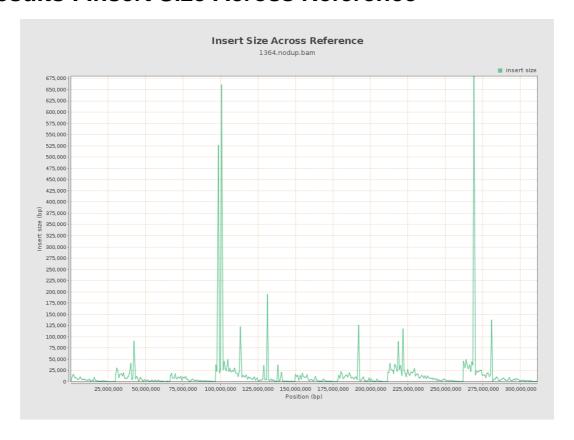


13. Results: Mapping Quality Histogram





14. Results: Insert Size Across Reference





15. Results: Insert Size Histogram

