Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2023/05/29 21:30:54



1. Input data & parameters

1.1. QualiMap command line

qualimap bamqc -bam /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/870 .nodup.bam -nw 400 -hm 3

1.2. Alignment

| BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 870 .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:Illumina\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_214/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_214_S295_L003 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_214/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_214_S295_L003 _R2_001.fastq.gz |
| Size of a homopolymer: | 3 |
| Number of windows: | 400 |



| Analysis date: | Mon May 29 21:30:54 CEST 2023 |
|----------------------------|-------------------------------|
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |



2. Summary

2.1. Globals

| Reference size | 311,642,060 |
|------------------------------|---------------------|
| Number of reads | 68,774,603 |
| Mapped reads | 61,817,110 / 89.88% |
| Unmapped reads | 6,957,493 / 10.12% |
| Mapped paired reads | 61,817,110 / 89.88% |
| Mapped reads, first in pair | 30,984,683 / 45.05% |
| Mapped reads, second in pair | 30,832,427 / 44.83% |
| Mapped reads, both in pair | 59,813,679 / 86.97% |
| Mapped reads, singletons | 2,003,431 / 2.91% |
| Read min/max/mean length | 30 / 151 / 147.93 |
| Duplicated reads (flagged) | 10,823,377 / 15.74% |
| Clipped reads | 15,636,160 / 22.74% |

2.2. ACGT Content

| Number/percentage of A's | 2,594,577,662 / 30.85% |
|--------------------------|------------------------|
| Number/percentage of C's | 1,608,293,260 / 19.12% |
| Number/percentage of T's | 2,597,250,679 / 30.88% |
| Number/percentage of G's | 1,609,447,248 / 19.14% |
| Number/percentage of N's | 31,175 / 0% |
| GC Percentage | 38.26% |

2.3. Coverage



| Mean | 27.0573 |
|--------------------|----------|
| Standard Deviation | 275.1756 |

2.4. Mapping Quality

| Mean Mapping Quality | 43.68 |
|----------------------|-------|

2.5. Insert size

| Mean | 271,869.39 |
|--------------------|-----------------|
| Standard Deviation | 2,514,139.92 |
| P25/Median/P75 | 316 / 418 / 547 |

2.6. Mismatches and indels

| General error rate | 2.43% |
|--|-------------|
| Mismatches | 187,145,648 |
| Insertions | 6,318,356 |
| Mapped reads with at least one insertion | 9.1% |
| Deletions | 6,034,895 |
| Mapped reads with at least one deletion | 8.64% |
| Homopolymer indels | 57.14% |

2.7. Chromosome stats

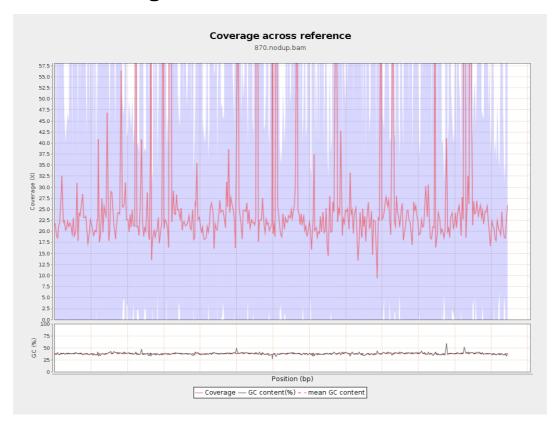
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|------------------|--------------------|
| LT669788.1 | 29724344 | 656386194 | 22.0824 | 115.1117 |



| LT669789.1 | 36598175 | 1003543114 | 27.4206 | 290.031 |
|------------|----------|------------|---------|----------|
| LT669790.1 | 30422129 | 1027269685 | 33.7672 | 393.699 |
| LT669791.1 | 52758100 | 1401020818 | 26.5556 | 302.787 |
| LT669792.1 | 28376109 | 766593410 | 27.0155 | 247.2351 |
| LT669793.1 | 33388210 | 837092509 | 25.0715 | 210.8883 |
| LT669794.1 | 50579949 | 1288026437 | 25.4652 | 227.7751 |
| LT669795.1 | 49795044 | 1452259572 | 29.1647 | 308.1119 |

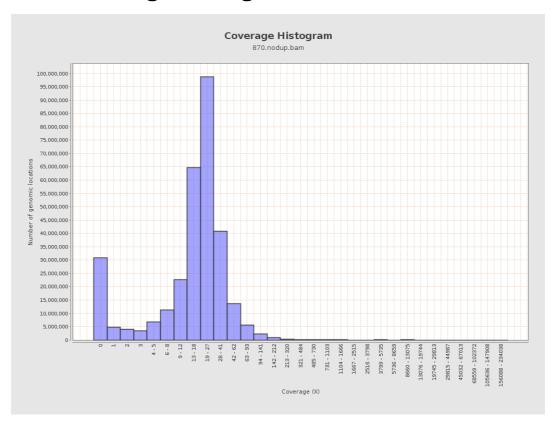


3. Results: Coverage across reference



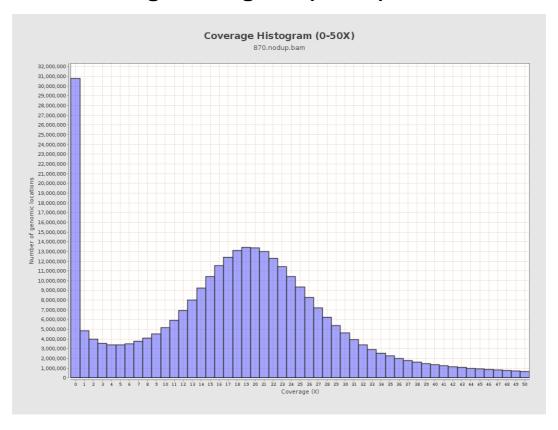


4. Results: Coverage Histogram



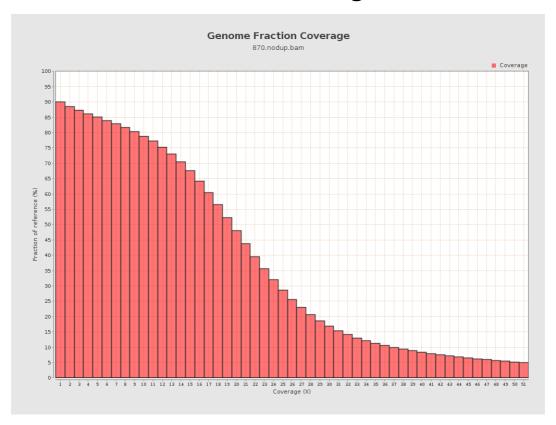


5. Results: Coverage Histogram (0-50X)



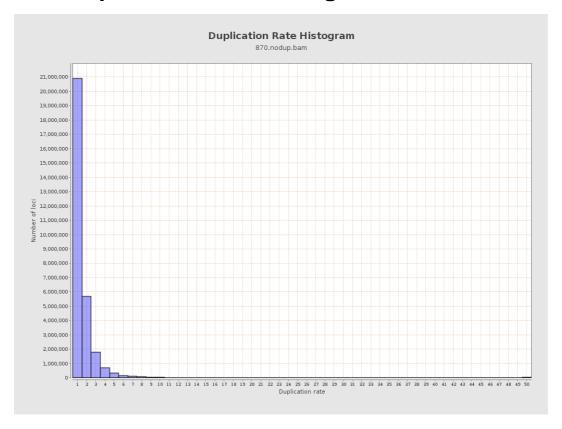


6. Results : Genome Fraction Coverage



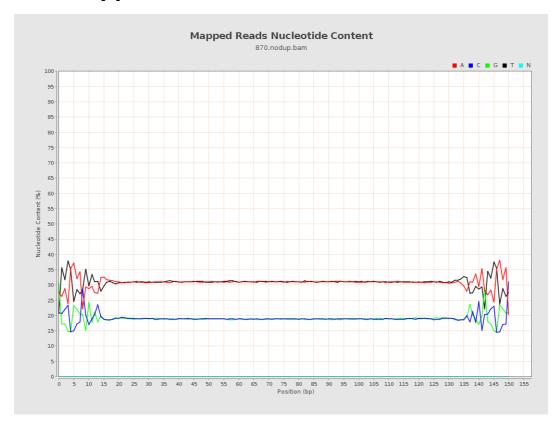


7. Results : Duplication Rate Histogram



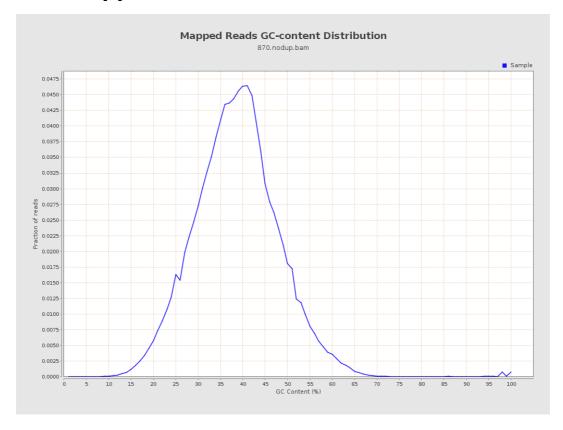


8. Results: Mapped Reads Nucleotide Content



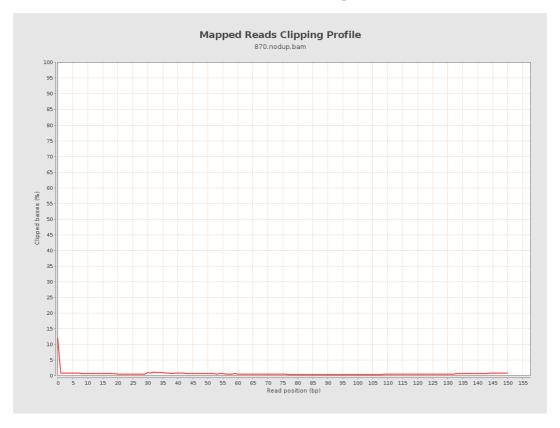


9. Results: Mapped Reads GC-content Distribution



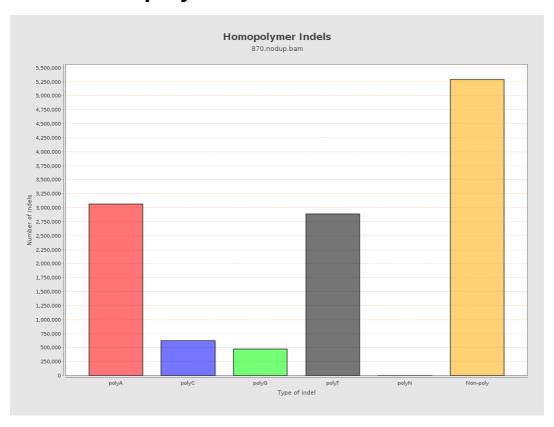


10. Results: Mapped Reads Clipping Profile



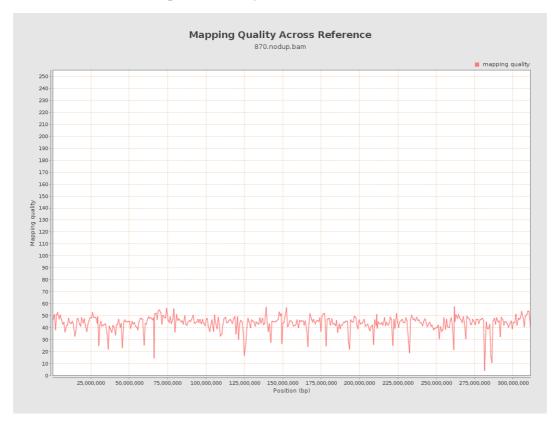


11. Results : Homopolymer Indels



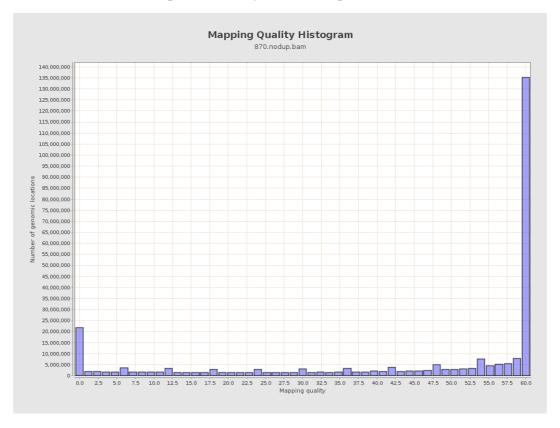


12. Results: Mapping Quality Across Reference



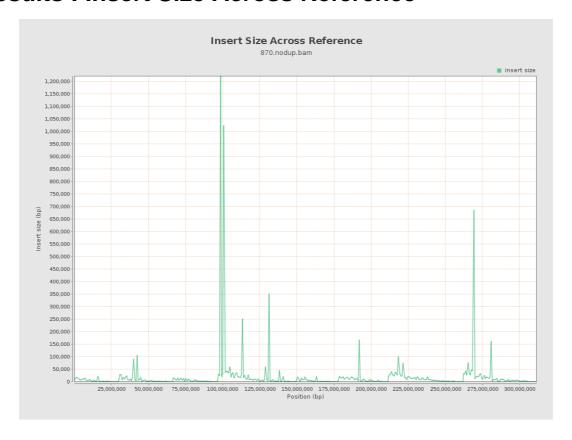


13. Results: Mapping Quality Histogram





14. Results: Insert Size Across Reference





15. Results: Insert Size Histogram

