Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2023/05/29 21:27:02



1. Input data & parameters

1.1. QualiMap command line

qualimap bamqc -bam /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/862 .nodup.bam -nw 400 -hm 3

1.2. Alignment

| BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 862 .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_466/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_466_S441_L004 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_466/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_466_S441_L004 _R2_001.fastq.gz |
| Size of a homopolymer: | 3 |
| Number of windows: | 400 |



| Analysis date: | Mon May 29 21:27:01 CEST 2023 |
|----------------------------|-------------------------------|
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |



2. Summary

2.1. Globals

| Reference size | 311,642,060 |
|------------------------------|---------------------|
| Number of reads | 52,759,397 |
| Mapped reads | 49,192,826 / 93.24% |
| Unmapped reads | 3,566,571 / 6.76% |
| Mapped paired reads | 49,192,826 / 93.24% |
| Mapped reads, first in pair | 24,633,142 / 46.69% |
| Mapped reads, second in pair | 24,559,684 / 46.55% |
| Mapped reads, both in pair | 48,026,726 / 91.03% |
| Mapped reads, singletons | 1,166,100 / 2.21% |
| Read min/max/mean length | 30 / 151 / 148.29 |
| Duplicated reads (flagged) | 7,281,614 / 13.8% |
| Clipped reads | 10,560,116 / 20.02% |

2.2. ACGT Content

| Number/percentage of A's | 2,114,149,369 / 30.88% | | |
|--------------------------|------------------------|--|--|
| Number/percentage of C's | 1,309,267,642 / 19.12% | | |
| Number/percentage of T's | 2,117,739,489 / 30.93% | | |
| Number/percentage of G's | 1,305,140,315 / 19.06% | | |
| Number/percentage of N's | 22,603 / 0% | | |
| GC Percentage | 38.19% | | |

2.3. Coverage



| Mean | 22.0242 |
|--------------------|----------|
| Standard Deviation | 170.0306 |

2.4. Mapping Quality

| Mean Mapping Quality | 44.63 |
|----------------------|-------|

2.5. Insert size

| Mean | 244,027.12 |
|--------------------|-----------------|
| Standard Deviation | 2,373,505.09 |
| P25/Median/P75 | 360 / 468 / 607 |

2.6. Mismatches and indels

| General error rate | 2.3% |
|--|-------------|
| Mismatches | 144,602,260 |
| Insertions | 4,617,895 |
| Mapped reads with at least one insertion | 8.42% |
| Deletions | 4,610,006 |
| Mapped reads with at least one deletion | 8.33% |
| Homopolymer indels | 56.75% |

2.7. Chromosome stats

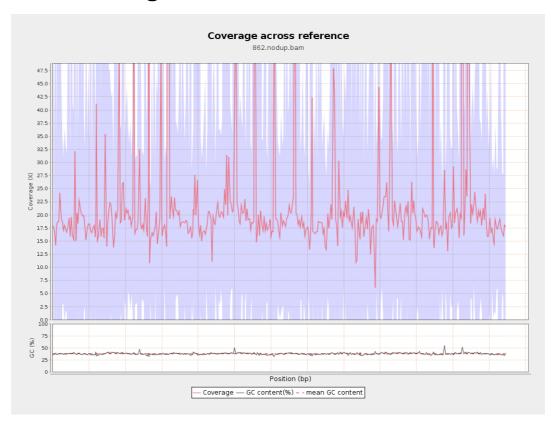
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|------------------|--------------------|
| LT669788.1 | 29724344 | 548220612 | 18.4435 | 57.4497 |



| LT669789.1 | 36598175 | 808555617 | 22.0928 | 188.1602 |
|------------|----------|------------|---------|----------|
| LT669790.1 | 30422129 | 738735584 | 24.2828 | 197.8378 |
| LT669791.1 | 52758100 | 1145854022 | 21.719 | 161.7181 |
| LT669792.1 | 28376109 | 615754835 | 21.6998 | 192.7554 |
| LT669793.1 | 33388210 | 668586653 | 20.0246 | 89.8021 |
| LT669794.1 | 50579949 | 1061074456 | 20.9782 | 149.3497 |
| LT669795.1 | 49795044 | 1276870917 | 25.6425 | 228.1626 |

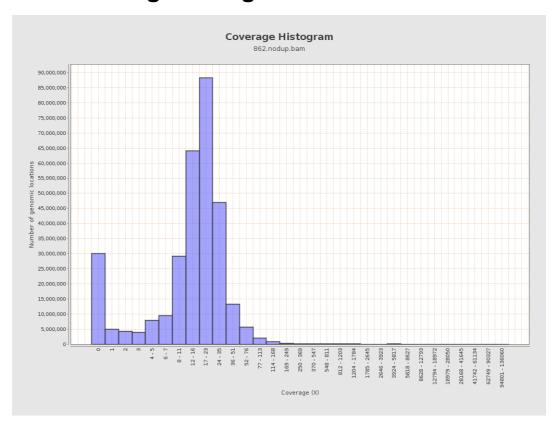


3. Results: Coverage across reference



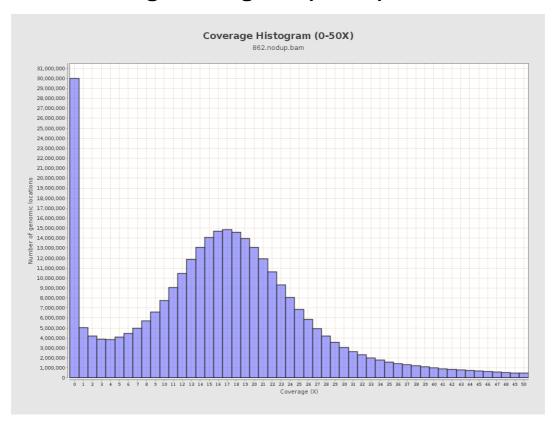


4. Results : Coverage Histogram



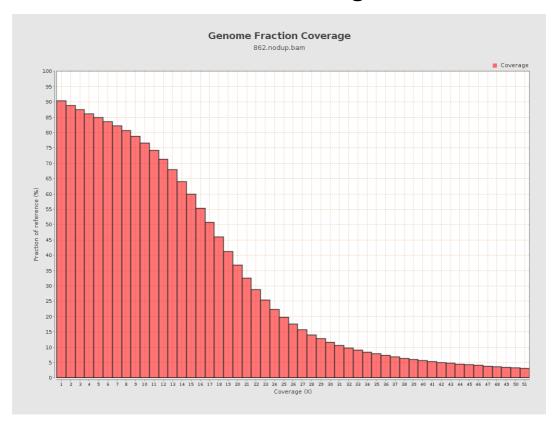


5. Results: Coverage Histogram (0-50X)



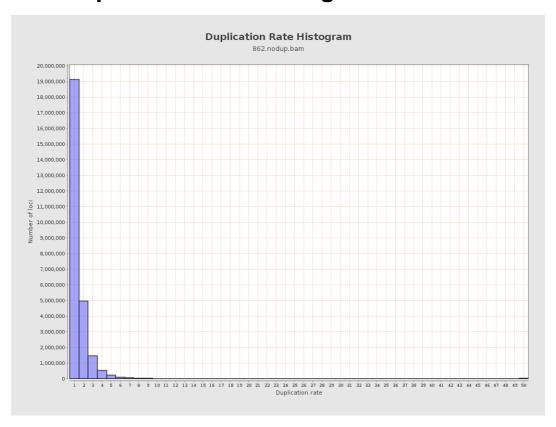


6. Results : Genome Fraction Coverage



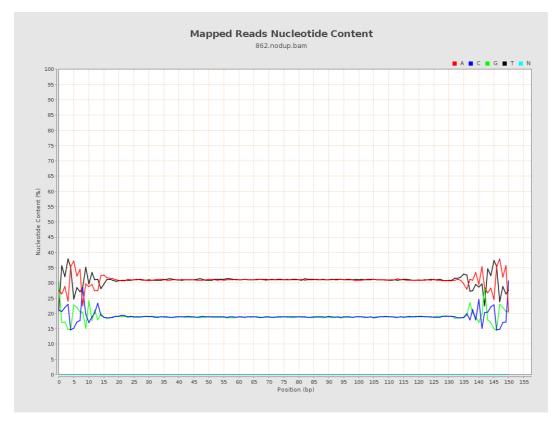


7. Results : Duplication Rate Histogram



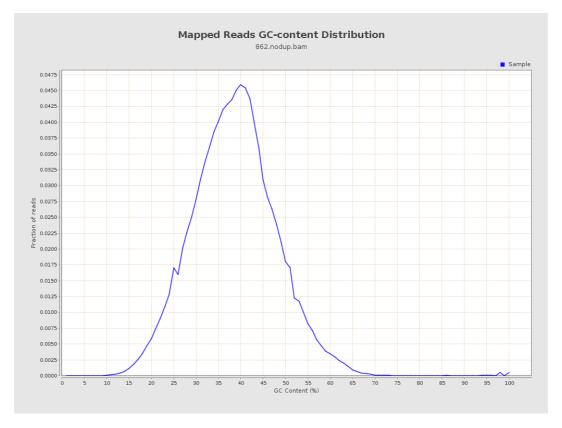


8. Results: Mapped Reads Nucleotide Content



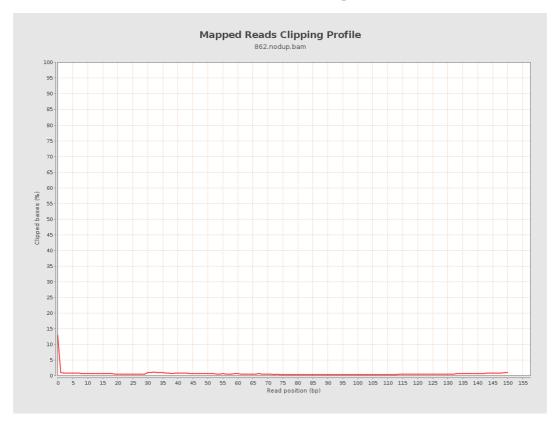


9. Results: Mapped Reads GC-content Distribution



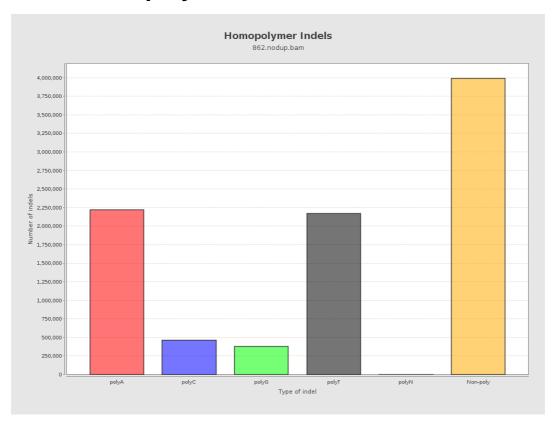


10. Results: Mapped Reads Clipping Profile





11. Results : Homopolymer Indels



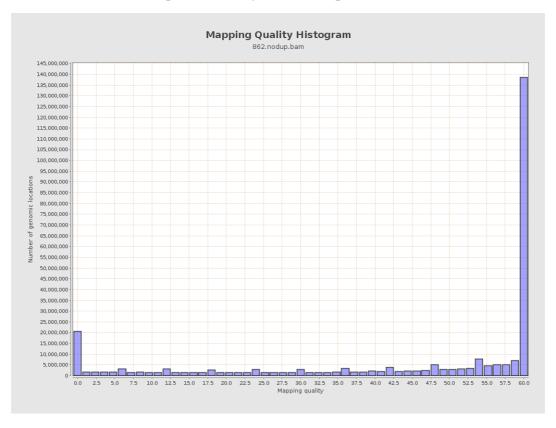


12. Results: Mapping Quality Across Reference



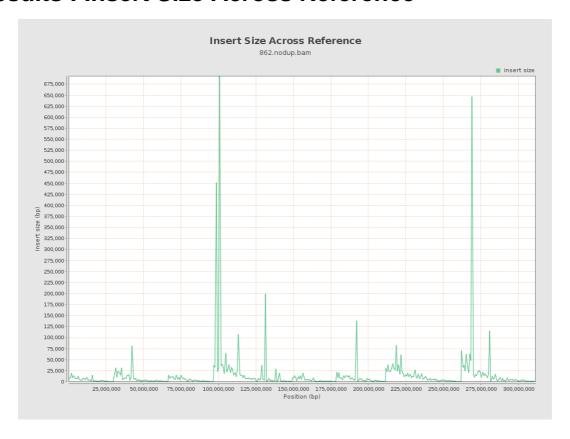


13. Results: Mapping Quality Histogram





14. Results: Insert Size Across Reference





15. Results: Insert Size Histogram

