Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2023/05/29 21:36:35



1. Input data & parameters

1.1. QualiMap command line

qualimap bamqc -bam /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/137 3 .nodup.bam -nw 400 -hm 3

1.2. Alignment

| Description | BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 1373 .nodup.bam |
|--|---|---|
| reads: Downward line: Downward line | Program: | bwa (0.7.17-r1188) |
| @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_457/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_457_S432_L004 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_457/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_457_S432_L004 _R2_001.fastq.gz | , | no |
| Size of a homopolymer: | Command line: | @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_457/02-FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_457_S432_L004_R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_457/02-FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_457_S432_L004 |
| | Size of a homopolymer: | 3 |



| Number of windows: | 400 |
|----------------------------|-------------------------------|
| Analysis date: | Mon May 29 21:36:34 CEST 2023 |
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |



2. Summary

2.1. Globals

| Reference size | 311,642,060 |
|------------------------------|---------------------|
| Number of reads | 77,058,592 |
| Mapped reads | 73,035,130 / 94.78% |
| Unmapped reads | 4,023,462 / 5.22% |
| Mapped paired reads | 73,035,130 / 94.78% |
| Mapped reads, first in pair | 36,549,324 / 47.43% |
| Mapped reads, second in pair | 36,485,806 / 47.35% |
| Mapped reads, both in pair | 71,695,329 / 93.04% |
| Mapped reads, singletons | 1,339,801 / 1.74% |
| Read min/max/mean length | 30 / 151 / 148.07 |
| Duplicated reads (flagged) | 11,469,899 / 14.88% |
| Clipped reads | 15,812,101 / 20.52% |

2.2. ACGT Content

| Number/percentage of A's | 3,130,281,711 / 30.79% | | |
|--------------------------|------------------------|--|--|
| Number/percentage of C's | 1,955,285,929 / 19.23% | | |
| Number/percentage of T's | 3,135,801,950 / 30.84% | | |
| Number/percentage of G's | 1,946,379,429 / 19.14% | | |
| Number/percentage of N's | 34,205 / 0% | | |
| GC Percentage | 38.37% | | |

2.3. Coverage



| Mean | 32.7126 |
|--------------------|----------|
| Standard Deviation | 242.5756 |

2.4. Mapping Quality

| Mean Mapping Quality | 43.86 |
|----------------------|-------|

2.5. Insert size

| Mean | 233,489.25 | |
|--------------------|-----------------|--|
| Standard Deviation | 2,278,986.22 | |
| P25/Median/P75 | 340 / 445 / 584 | |

2.6. Mismatches and indels

| General error rate | 2.28% |
|--|-------------|
| Mismatches | 213,392,203 |
| Insertions | 6,782,773 |
| Mapped reads with at least one insertion | 8.36% |
| Deletions | 7,042,953 |
| Mapped reads with at least one deletion | 8.57% |
| Homopolymer indels | 56.45% |

2.7. Chromosome stats

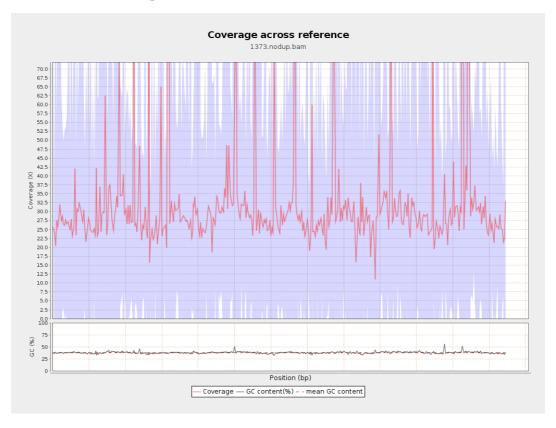
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|------------------|--------------------|
| LT669788.1 | 29724344 | 801986621 | 26.9808 | 69.9537 |



| LT669789.1 | 36598175 | 1237984063 | 33.8264 | 270.7444 |
|------------|----------|------------|---------|----------|
| LT669790.1 | 30422129 | 1025153907 | 33.6976 | 226.4161 |
| LT669791.1 | 52758100 | 1696837447 | 32.1626 | 200.395 |
| LT669792.1 | 28376109 | 897979777 | 31.6456 | 255.9534 |
| LT669793.1 | 33388210 | 1029309603 | 30.8285 | 178.2163 |
| LT669794.1 | 50579949 | 1583769288 | 31.3122 | 214.3412 |
| LT669795.1 | 49795044 | 1921601473 | 38.5902 | 363.6592 |

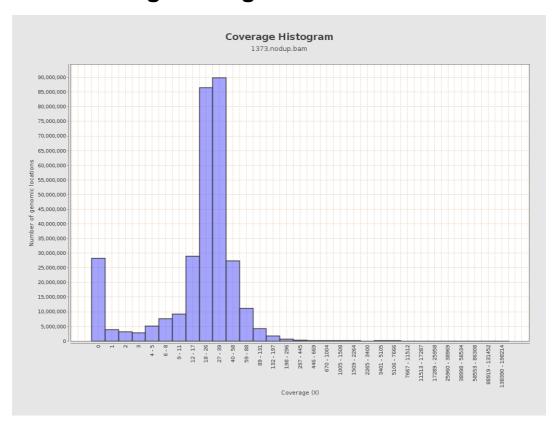


3. Results: Coverage across reference



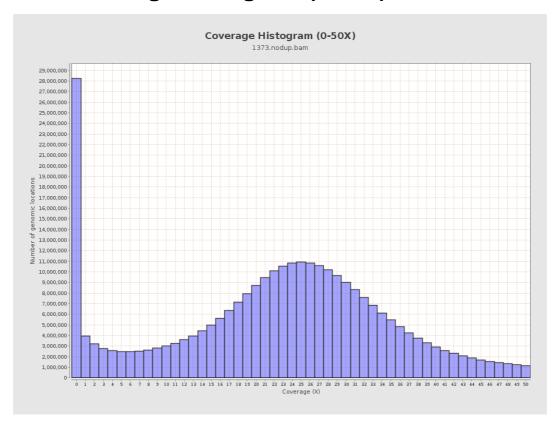


4. Results : Coverage Histogram



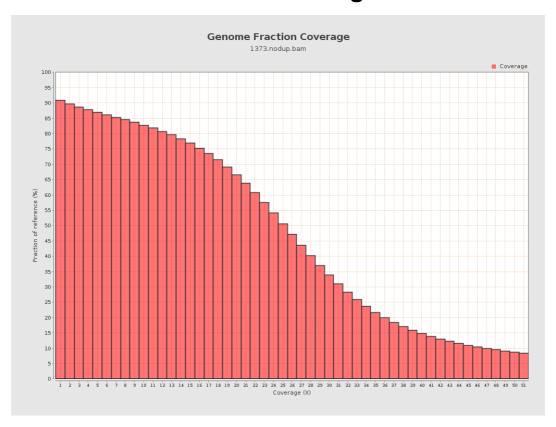


5. Results: Coverage Histogram (0-50X)



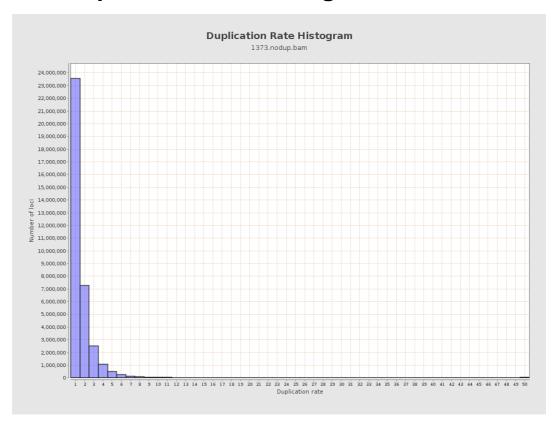


6. Results : Genome Fraction Coverage



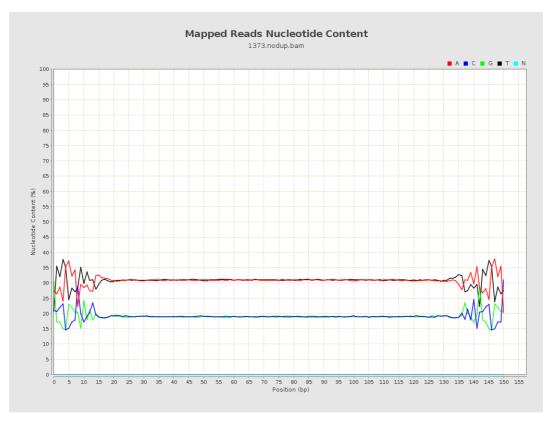


7. Results: Duplication Rate Histogram



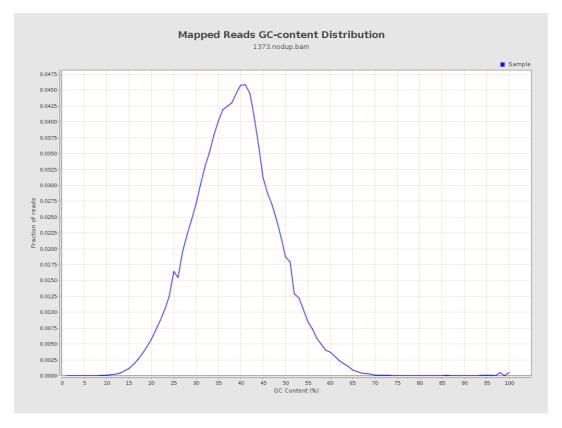


8. Results: Mapped Reads Nucleotide Content



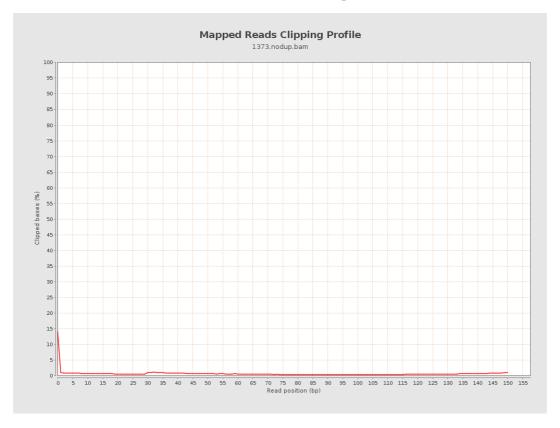


9. Results: Mapped Reads GC-content Distribution



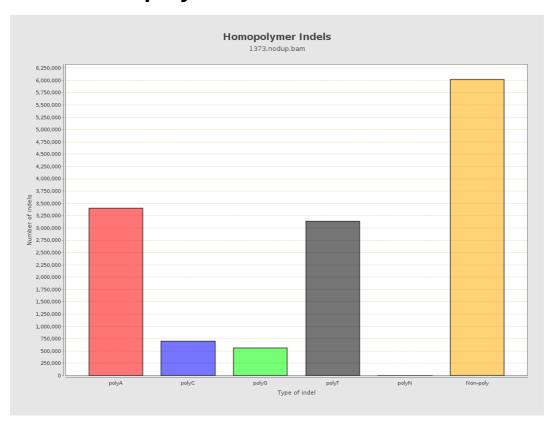


10. Results: Mapped Reads Clipping Profile





11. Results : Homopolymer Indels



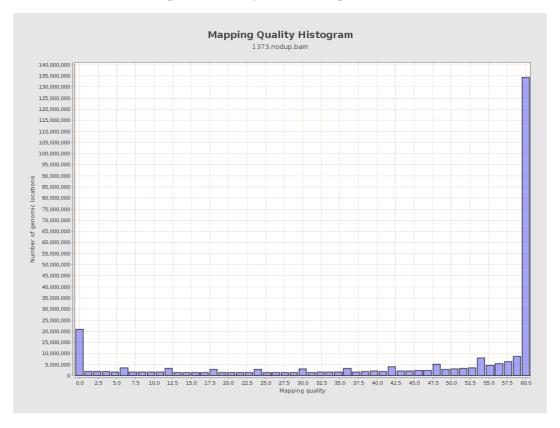


12. Results: Mapping Quality Across Reference



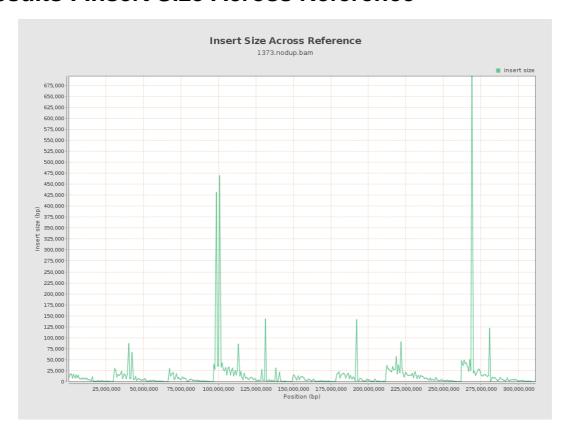


13. Results: Mapping Quality Histogram





14. Results: Insert Size Across Reference





15. Results: Insert Size Histogram

