Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2023/05/29 21:37:33



1. Input data & parameters

1.1. QualiMap command line

qualimap bamqc -bam /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/831 .nodup.bam -nw 400 -hm 3

1.2. Alignment

| BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 831 .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:\unit\tPL:Illumina\tLB:LibA\t SM:\unit\tPL:Illumina\tLB:LibA\t SM:\unit\tPL:Illumina\tLB:LibA\t SM:\unit\tPL:Illumina\tLB:LibA\t SM:\unit\tPanilon \unitaria \text{Indiana} | | |
| Size of a homopolymer: | 3 | | |
| Number of windows: | 400 | | |



| Analysis date: | Mon May 29 21:37:32 CEST 2023 |
|----------------------------|-------------------------------|
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |



2. Summary

2.1. Globals

| Reference size | 311,642,060 |
|------------------------------|---------------------|
| Number of reads | 82,752,063 |
| Mapped reads | 77,157,575 / 93.24% |
| Unmapped reads | 5,594,488 / 6.76% |
| Mapped paired reads | 77,157,575 / 93.24% |
| Mapped reads, first in pair | 38,758,329 / 46.84% |
| Mapped reads, second in pair | 38,399,246 / 46.4% |
| Mapped reads, both in pair | 75,416,905 / 91.14% |
| Mapped reads, singletons | 1,740,670 / 2.1% |
| Read min/max/mean length | 30 / 151 / 148.11 |
| Duplicated reads (flagged) | 12,313,827 / 14.88% |
| Clipped reads | 19,034,038 / 23% |

2.2. ACGT Content

| Number/percentage of A's | 3,279,529,468 / 30.94% | | |
|--------------------------|------------------------|--|--|
| Number/percentage of C's | 2,019,539,960 / 19.05% | | |
| Number/percentage of T's | 3,286,446,417 / 31% | | |
| Number/percentage of G's | 2,015,013,886 / 19.01% | | |
| Number/percentage of N's | 75,345 / 0% | | |
| GC Percentage | 38.06% | | |

2.3. Coverage



| Mean | 34.1026 |
|--------------------|----------|
| Standard Deviation | 262.9725 |

2.4. Mapping Quality

| 44.26 |
|-------|
| 1 |

2.5. Insert size

| Mean | 226,559.71 |
|--------------------|-----------------|
| Standard Deviation | 2,268,494.82 |
| P25/Median/P75 | 323 / 431 / 562 |

2.6. Mismatches and indels

| General error rate | 2.55% |
|--|-------------|
| Mismatches | 250,324,525 |
| Insertions | 7,115,764 |
| Mapped reads with at least one insertion | 8.28% |
| Deletions | 7,212,696 |
| Mapped reads with at least one deletion | 8.31% |
| Homopolymer indels | 56.4% |

2.7. Chromosome stats

| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|------------------|--------------------|
| LT669788.1 | 29724344 | 863622329 | 29.0544 | 81.7794 |



| LT669789.1 | 36598175 | 1241541204 | 33.9236 | 254.9666 |
|------------|----------|------------|---------|----------|
| LT669790.1 | 30422129 | 1127064778 | 37.0475 | 279.182 |
| LT669791.1 | 52758100 | 1758553565 | 33.3324 | 232.5296 |
| LT669792.1 | 28376109 | 971463008 | 34.2352 | 281.8555 |
| LT669793.1 | 33388210 | 1060005577 | 31.7479 | 186.516 |
| LT669794.1 | 50579949 | 1610363020 | 31.838 | 213.3674 |
| LT669795.1 | 49795044 | 1995178862 | 40.0678 | 401.5221 |

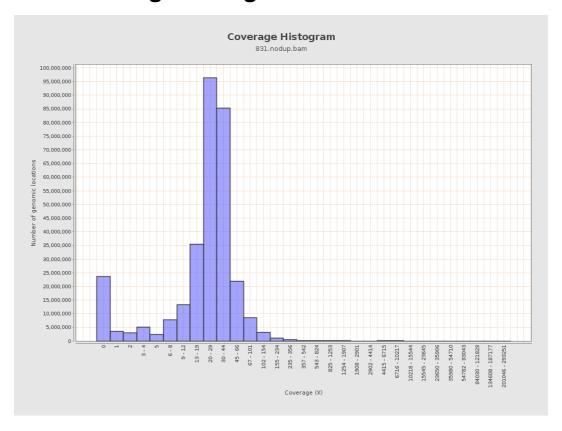


3. Results: Coverage across reference



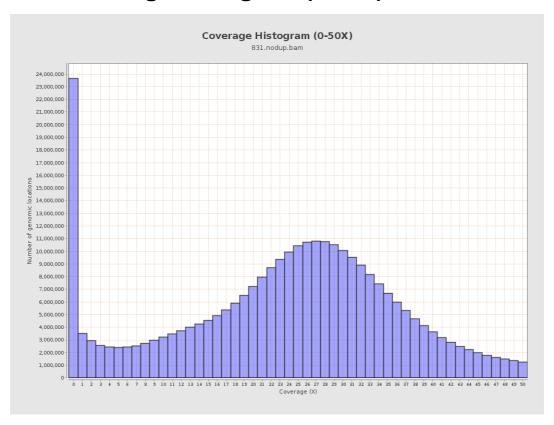


4. Results: Coverage Histogram



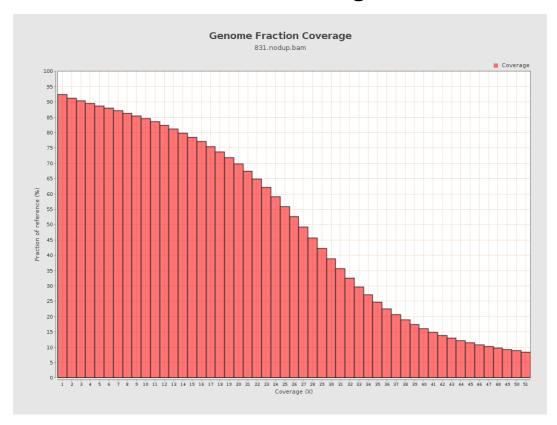


5. Results: Coverage Histogram (0-50X)



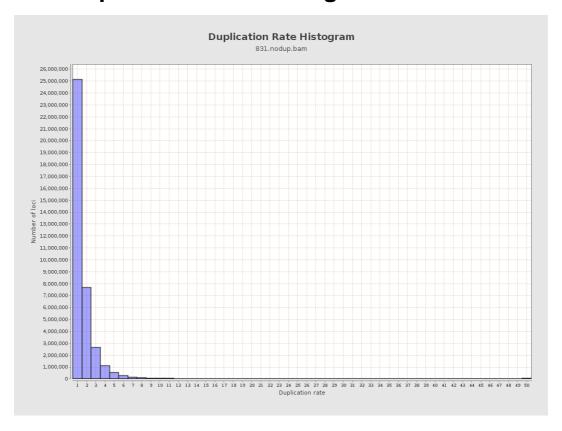


6. Results : Genome Fraction Coverage





7. Results: Duplication Rate Histogram



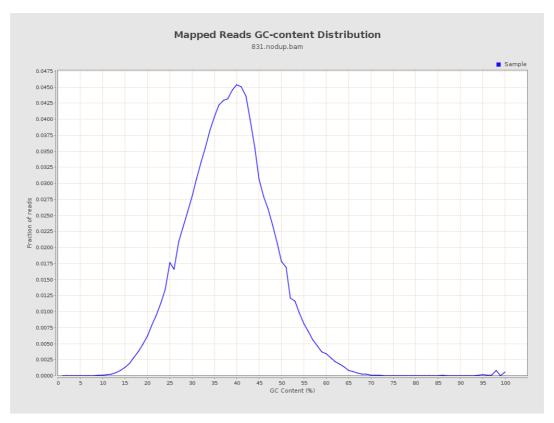


8. Results: Mapped Reads Nucleotide Content



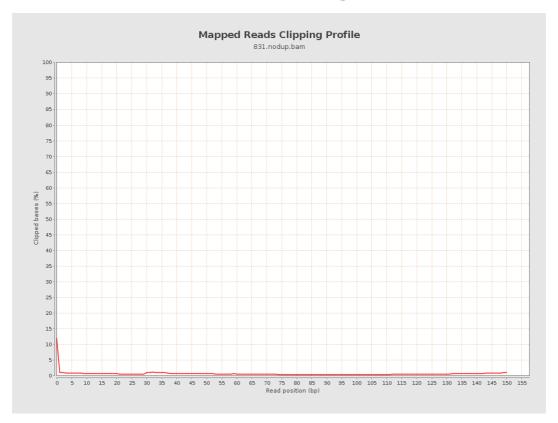


9. Results: Mapped Reads GC-content Distribution



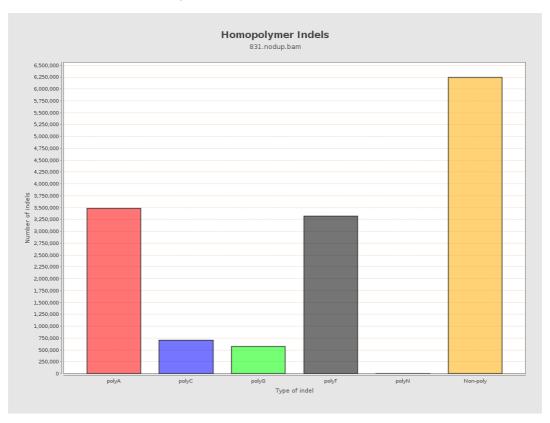


10. Results: Mapped Reads Clipping Profile





11. Results : Homopolymer Indels



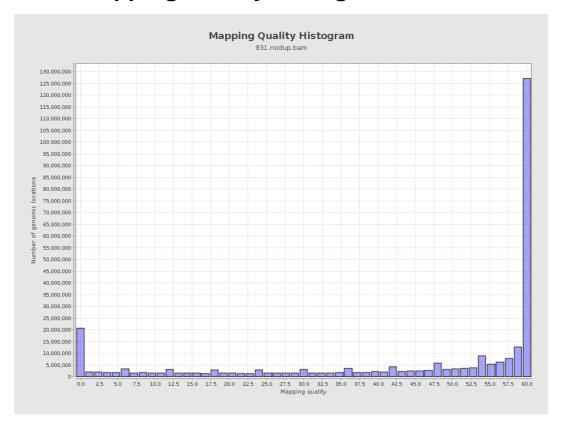


12. Results: Mapping Quality Across Reference



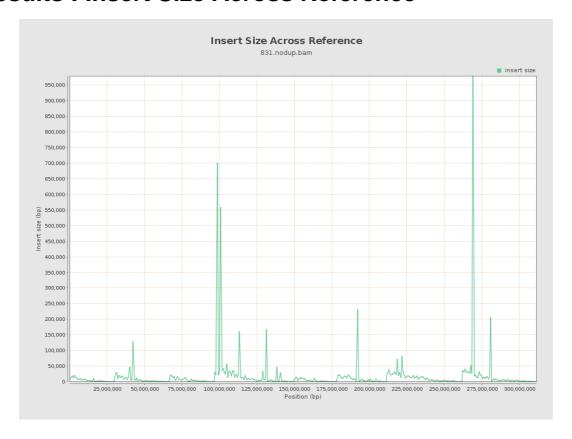


13. Results: Mapping Quality Histogram





14. Results: Insert Size Across Reference





15. Results: Insert Size Histogram

