Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2023/05/29 21:34:13



1. Input data & parameters

1.1. QualiMap command line

qualimap bamqc -bam /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/413 .nodup.bam -nw 400 -hm 3

1.2. Alignment

| BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 413 .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_171/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_171_S261_L002 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_171/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_171_S261_L002 _R2_001.fastq.gz |
| Size of a homopolymer: | 3 |
| Number of windows: | 400 |



| Analysis date: | Mon May 29 21:34:13 CEST 2023 |
|----------------------------|-------------------------------|
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |



2. Summary

2.1. Globals

| Reference size | 311,642,060 |
|------------------------------|---------------------|
| Number of reads | 75,818,645 |
| Mapped reads | 70,727,476 / 93.29% |
| Unmapped reads | 5,091,169 / 6.71% |
| Mapped paired reads | 70,727,476 / 93.29% |
| Mapped reads, first in pair | 35,420,227 / 46.72% |
| Mapped reads, second in pair | 35,307,249 / 46.57% |
| Mapped reads, both in pair | 69,055,850 / 91.08% |
| Mapped reads, singletons | 1,671,626 / 2.2% |
| Read min/max/mean length | 30 / 151 / 148.05 |
| Duplicated reads (flagged) | 12,556,084 / 16.56% |
| Clipped reads | 15,873,126 / 20.94% |

2.2. ACGT Content

| Number/percentage of A's | 3,017,960,673 / 30.81% | | |
|--------------------------|------------------------|--|--|
| Number/percentage of C's | 1,880,240,809 / 19.19% | | |
| Number/percentage of T's | 3,022,542,342 / 30.85% | | |
| Number/percentage of G's | 1,875,836,427 / 19.15% | | |
| Number/percentage of N's | 41,251 / 0% | | |
| GC Percentage | 38.34% | | |

2.3. Coverage



| Mean | 31.5196 |
|--------------------|----------|
| Standard Deviation | 269.4051 |

2.4. Mapping Quality

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

2.5. Insert size

| Mean | 245,177.42 | |
|--------------------|-----------------|--|
| Standard Deviation | 2,360,264.42 | |
| P25/Median/P75 | 329 / 429 / 563 | |

2.6. Mismatches and indels

| General error rate | 2.34% |
|--|-------------|
| Mismatches | 210,821,534 |
| Insertions | 6,857,898 |
| Mapped reads with at least one insertion | 8.69% |
| Deletions | 6,896,267 |
| Mapped reads with at least one deletion | 8.63% |
| Homopolymer indels | 56.19% |

2.7. Chromosome stats

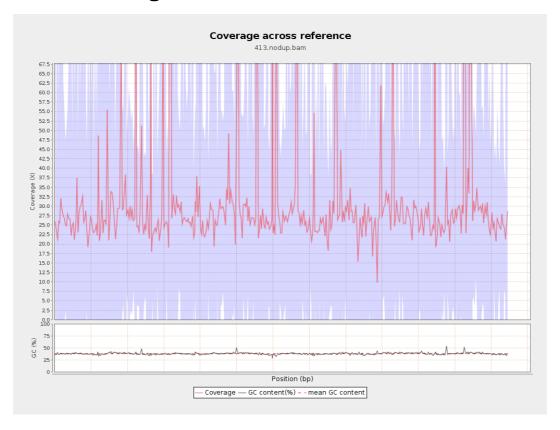
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|------------------|--------------------|
| LT669788.1 | 29724344 | 773325225 | 26.0166 | 100.2899 |



| LT669789.1 | 36598175 | 1165624684 | 31.8493 | 289.4581 |
|------------|----------|------------|---------|----------|
| LT669790.1 | 30422129 | 1065851061 | 35.0354 | 291.0475 |
| LT669791.1 | 52758100 | 1630465136 | 30.9045 | 268.317 |
| LT669792.1 | 28376109 | 892165443 | 31.4407 | 286.5748 |
| LT669793.1 | 33388210 | 979015368 | 29.3222 | 175.1236 |
| LT669794.1 | 50579949 | 1501781264 | 29.6912 | 240.1367 |
| LT669795.1 | 49795044 | 1814609035 | 36.4416 | 364.179 |

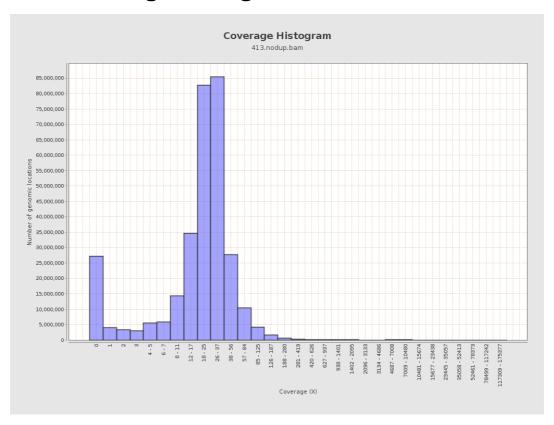


3. Results: Coverage across reference



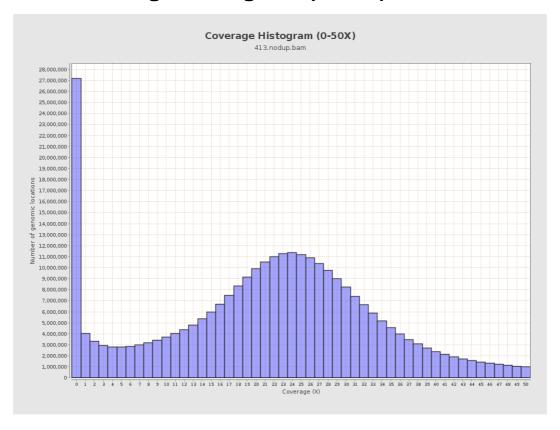


4. Results : Coverage Histogram



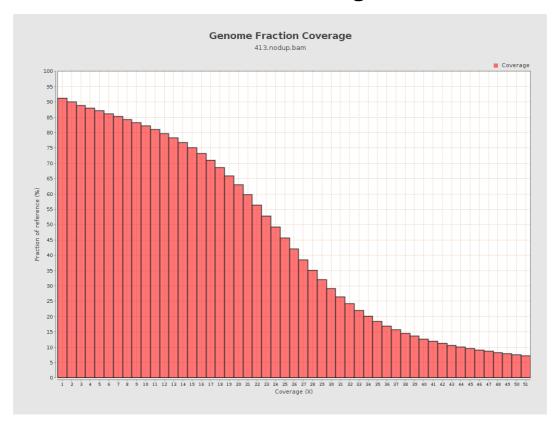


5. Results: Coverage Histogram (0-50X)



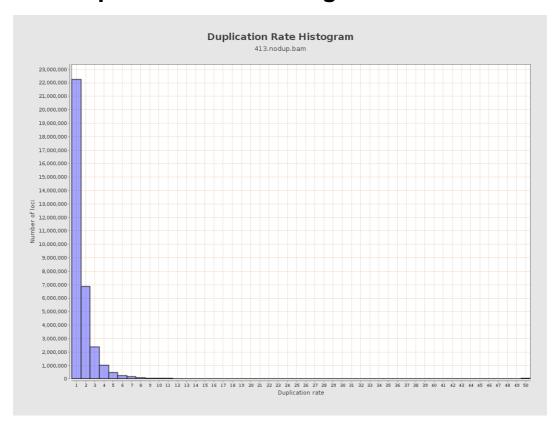


6. Results : Genome Fraction Coverage





7. Results: Duplication Rate Histogram



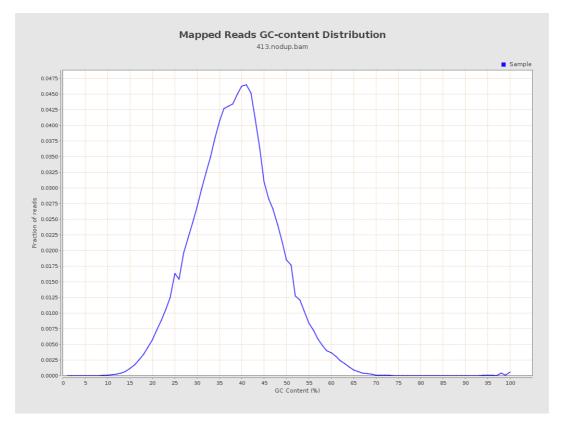


8. Results: Mapped Reads Nucleotide Content



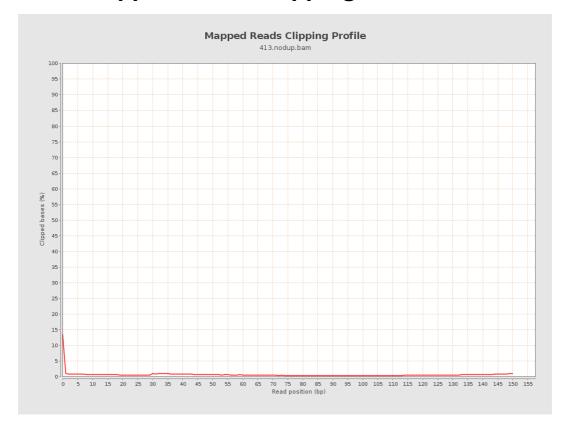


9. Results: Mapped Reads GC-content Distribution



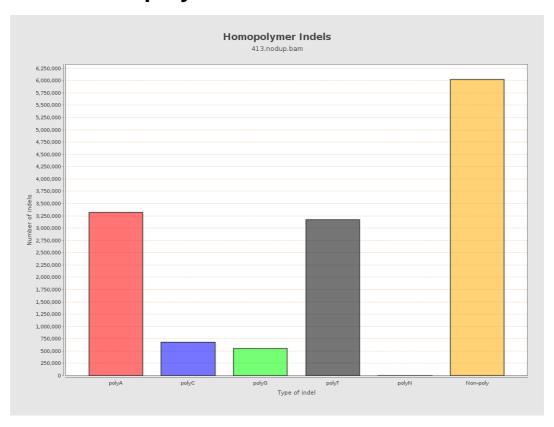


10. Results: Mapped Reads Clipping Profile



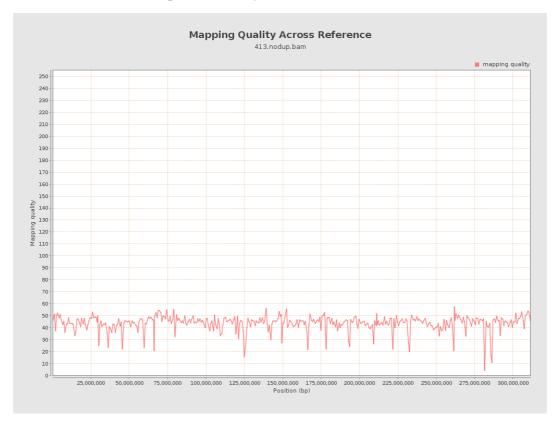


11. Results : Homopolymer Indels



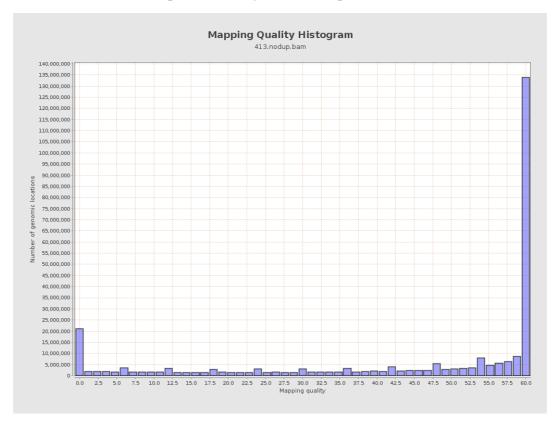


12. Results: Mapping Quality Across Reference



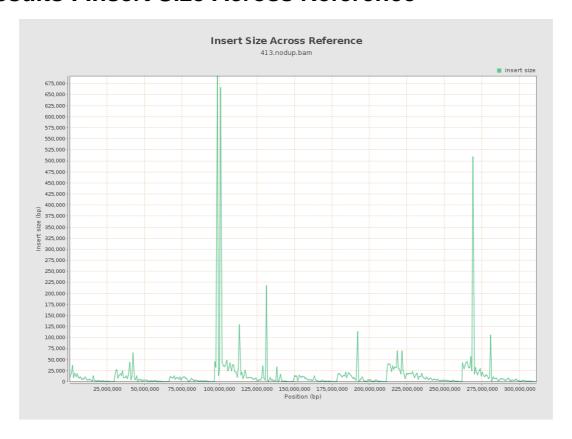


13. Results: Mapping Quality Histogram





14. Results: Insert Size Across Reference





15. Results: Insert Size Histogram

