Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2023/05/29 21:28:18



1. Input data & parameters

1.1. QualiMap command line

qualimap bamqc -bam /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/145 3 .nodup.bam -nw 400 -hm 3

1.2. Alignment

| Description | BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 1453 .nodup.bam |
|--|---------------------------------------|--|
| reads: Downward line: Downward line | Program: | bwa (0.7.17-r1188) |
| @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_534/02- FASTQ/220906_A00187_0838_AHM G3KDSX3/P26207_534_S101_L004 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_534/02- FASTQ/220906_A00187_0838_AHM G3KDSX3/P26207_534_S101_L004 _R2_001.fastq.gz | ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' | no |
| Size of a homopolymer: | Command line: | @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_534/02- FASTQ/220906_A00187_0838_AHM G3KDSX3/P26207_534_S101_L004 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_534/02- FASTQ/220906_A00187_0838_AHM G3KDSX3/P26207_534_S101_L004 |
| | Size of a homopolymer: | 3 |



| Number of windows: | 400 |
|----------------------------|-------------------------------|
| Analysis date: | Mon May 29 21:28:17 CEST 2023 |
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |



2. Summary

2.1. Globals

| Reference size | 311,642,060 |
|------------------------------|---------------------|
| Number of reads | 63,942,858 |
| Mapped reads | 60,424,253 / 94.5% |
| Unmapped reads | 3,518,605 / 5.5% |
| Mapped paired reads | 60,424,253 / 94.5% |
| Mapped reads, first in pair | 30,312,621 / 47.41% |
| Mapped reads, second in pair | 30,111,632 / 47.09% |
| Mapped reads, both in pair | 59,214,818 / 92.61% |
| Mapped reads, singletons | 1,209,435 / 1.89% |
| Read min/max/mean length | 30 / 151 / 148.05 |
| Duplicated reads (flagged) | 8,300,795 / 12.98% |
| Clipped reads | 14,198,563 / 22.21% |

2.2. ACGT Content

| Number/percentage of A's | 2,580,606,829 / 30.9% | | |
|--------------------------|------------------------|--|--|
| Number/percentage of C's | 1,596,873,532 / 19.12% | | |
| Number/percentage of T's | 2,582,896,348 / 30.92% | | |
| Number/percentage of G's | 1,592,445,344 / 19.06% | | |
| Number/percentage of N's | 59,220 / 0% | | |
| GC Percentage | 38.18% | | |

2.3. Coverage



| Mean | 26.8713 |
|--------------------|----------|
| Standard Deviation | 196.7213 |

2.4. Mapping Quality

| Mann Manning Quality | 4.4 |
|----------------------|-----|
| Mean Mapping Quality | 44 |

2.5. Insert size

| Mean | 225,380.51 |
|--------------------|-----------------|
| Standard Deviation | 2,254,470.03 |
| P25/Median/P75 | 316 / 415 / 538 |

2.6. Mismatches and indels

| General error rate | 2.5% |
|--|-------------|
| Mismatches | 193,119,127 |
| Insertions | 5,592,182 |
| Mapped reads with at least one insertion | 8.32% |
| Deletions | 5,698,246 |
| Mapped reads with at least one deletion | 8.35% |
| Homopolymer indels | 55.99% |

2.7. Chromosome stats

| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|------------------|--------------------|
| LT669788.1 | 29724344 | 684341332 | 23.0229 | 77.3201 |



| LT669789.1 | 36598175 | 997728935 | 27.2617 | 218.1708 |
|------------|----------|------------|---------|----------|
| LT669790.1 | 30422129 | 892857515 | 29.3489 | 198.8374 |
| LT669791.1 | 52758100 | 1378206610 | 26.1231 | 189.5994 |
| LT669792.1 | 28376109 | 764437855 | 26.9395 | 198.3193 |
| LT669793.1 | 33388210 | 823355577 | 24.6601 | 103.6682 |
| LT669794.1 | 50579949 | 1293217723 | 25.5678 | 186.9431 |
| LT669795.1 | 49795044 | 1540084147 | 30.9285 | 276.1393 |

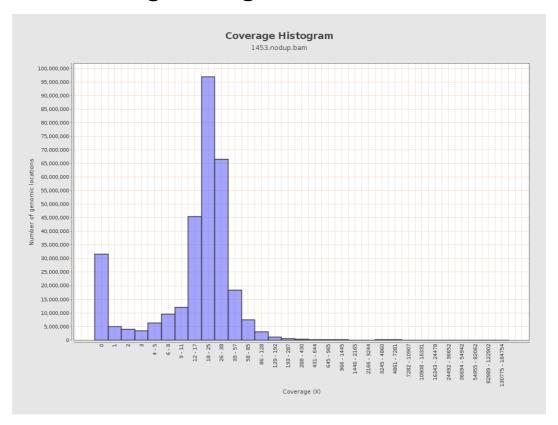


3. Results: Coverage across reference



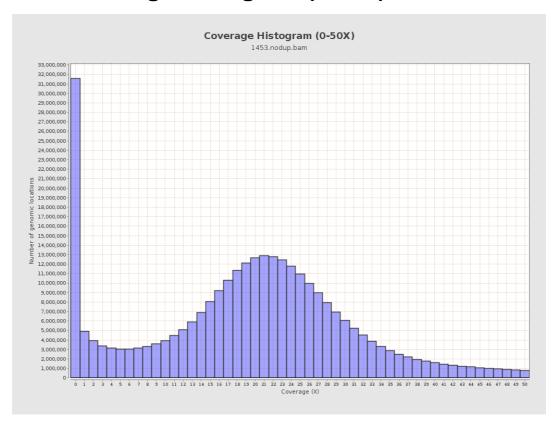


4. Results: Coverage Histogram



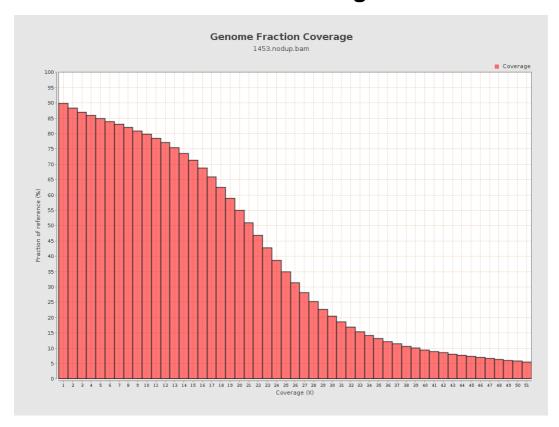


5. Results: Coverage Histogram (0-50X)



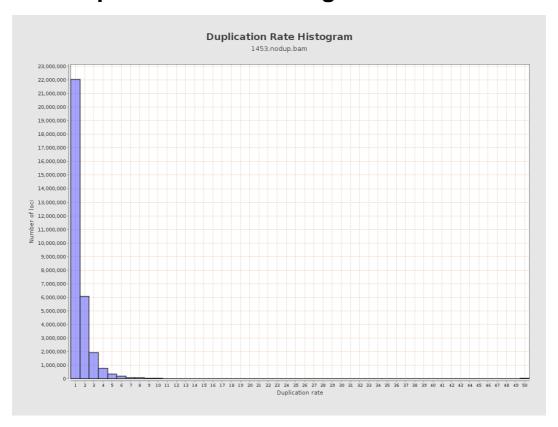


6. Results : Genome Fraction Coverage





7. Results: Duplication Rate Histogram



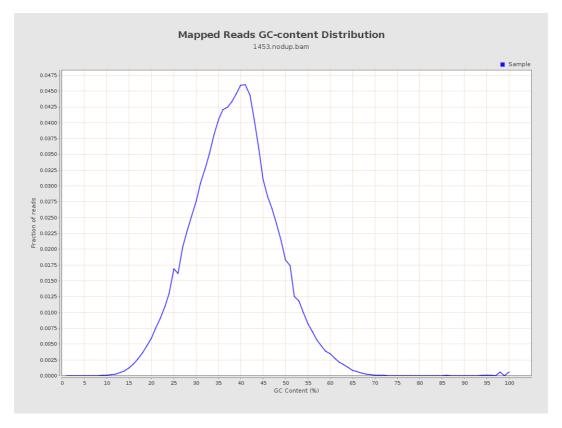


8. Results: Mapped Reads Nucleotide Content



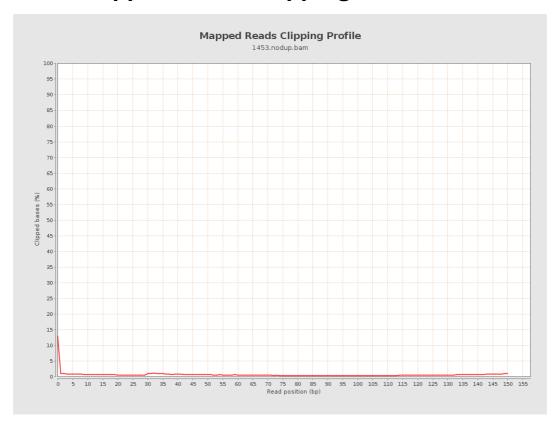


9. Results: Mapped Reads GC-content Distribution



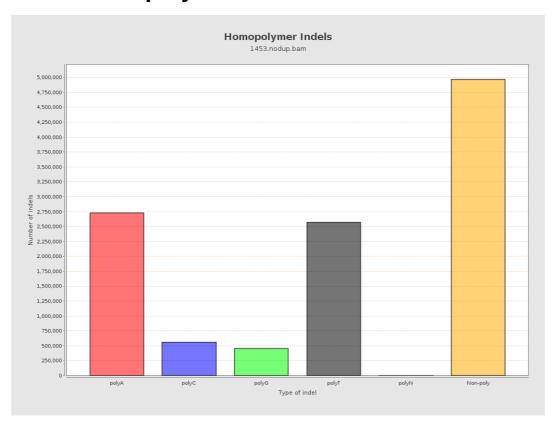


10. Results: Mapped Reads Clipping Profile





11. Results : Homopolymer Indels



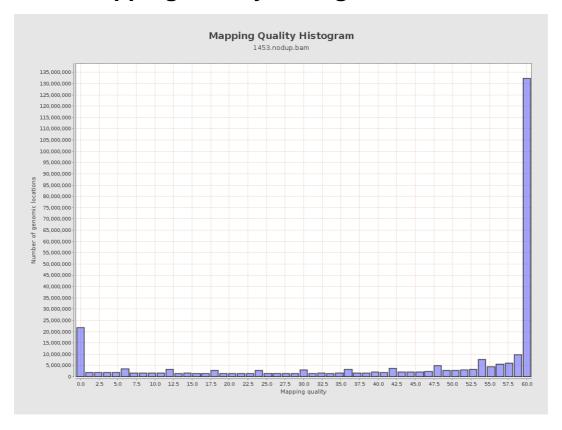


12. Results: Mapping Quality Across Reference



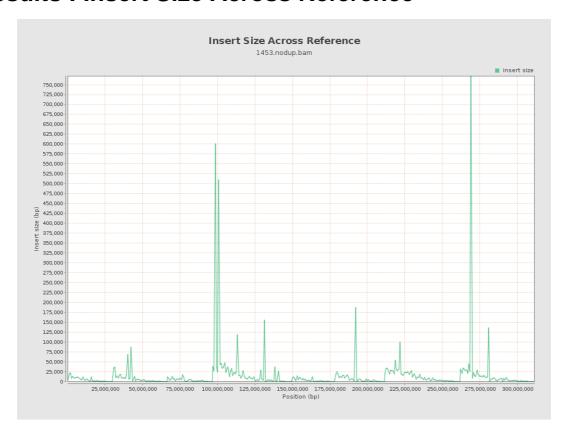


13. Results: Mapping Quality Histogram





14. Results: Insert Size Across Reference





15. Results: Insert Size Histogram

