Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2023/05/29 21:34:31



1. Input data & parameters

1.1. QualiMap command line

qualimap bamqc -bam /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/116 9 .nodup.bam -nw 400 -hm 3

1.2. Alignment

| BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 1169 .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:IIIumina\tLB:LibA\t SM:\unit\tPL:IIIumina\tLB:LibA\t SM:\unit\tPL:IIIumina\tLB:LibA\t SM:\unit\text{sample} /proj/uppstore2018210/Aalpina/data/r eference/GCA_900128785.1_MPIPZ. v5_genomic.fa /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_535/02- FASTQ/220906_A00187_0838_AHM G3KDSX3/P26207_535_S102_L004 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_535/02- FASTQ/220906_A00187_0838_AHM G3KDSX3/P26207_535_S102_L004 _R2_001.fastq.gz |
| Size of a homopolymer: | 3 |
| | |



| Number of windows: | 400 |
|----------------------------|-------------------------------|
| Analysis date: | Mon May 29 21:34:30 CEST 2023 |
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |



2. Summary

2.1. Globals

| Reference size | 311,642,060 |
|------------------------------|---------------------|
| Number of reads | 71,537,074 |
| Mapped reads | 67,132,623 / 93.84% |
| Unmapped reads | 4,404,451 / 6.16% |
| Mapped paired reads | 67,132,623 / 93.84% |
| Mapped reads, first in pair | 33,662,991 / 47.06% |
| Mapped reads, second in pair | 33,469,632 / 46.79% |
| Mapped reads, both in pair | 65,698,647 / 91.84% |
| Mapped reads, singletons | 1,433,976 / 2% |
| Read min/max/mean length | 30 / 151 / 148.29 |
| Duplicated reads (flagged) | 10,021,640 / 14.01% |
| Clipped reads | 15,176,521 / 21.21% |

2.2. ACGT Content

| Number/percentage of A's | 2,889,482,887 / 31.03% |
|--------------------------|------------------------|
| Number/percentage of C's | 1,768,201,924 / 18.99% |
| Number/percentage of T's | 2,891,150,505 / 31.05% |
| Number/percentage of G's | 1,762,789,299 / 18.93% |
| Number/percentage of N's | 66,758 / 0% |
| GC Percentage | 37.92% |

2.3. Coverage



| Mean | 29.9535 |
|--------------------|----------|
| Standard Deviation | 212.5459 |

2.4. Mapping Quality

| Mean Mapping Quality | 44.74 |
|----------------------|-------|
| | |

2.5. Insert size

| Mean | 214,926.43 | |
|--------------------|-----------------|--|
| Standard Deviation | 2,213,018.66 | |
| P25/Median/P75 | 319 / 416 / 534 | |

2.6. Mismatches and indels

| General error rate | 2.43% |
|--|-------------|
| Mismatches | 209,400,965 |
| Insertions | 6,099,534 |
| Mapped reads with at least one insertion | 8.17% |
| Deletions | 6,149,876 |
| Mapped reads with at least one deletion | 8.15% |
| Homopolymer indels | 56.83% |

2.7. Chromosome stats

| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|------------------|--------------------|
| LT669788.1 | 29724344 | 763551594 | 25.6878 | 65.8115 |



| LT669789.1 | 36598175 | 1086373755 | 29.6838 | 214.9207 |
|------------|----------|------------|---------|----------|
| LT669790.1 | 30422129 | 1010188677 | 33.2057 | 242.9422 |
| LT669791.1 | 52758100 | 1548554794 | 29.352 | 185.4133 |
| LT669792.1 | 28376109 | 849895386 | 29.9511 | 230.2347 |
| LT669793.1 | 33388210 | 928996949 | 27.8241 | 160.397 |
| LT669794.1 | 50579949 | 1421885068 | 28.1116 | 183.1103 |
| LT669795.1 | 49795044 | 1725322806 | 34.6485 | 303.5685 |

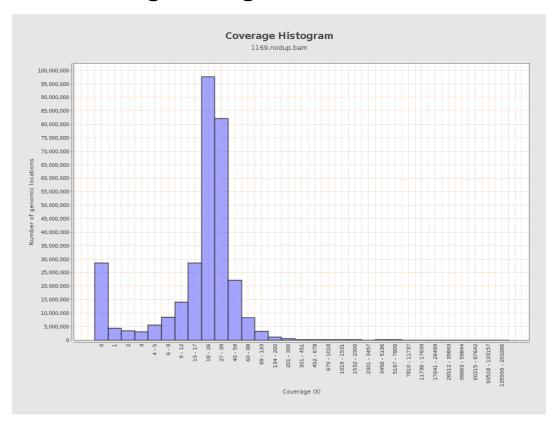


3. Results: Coverage across reference



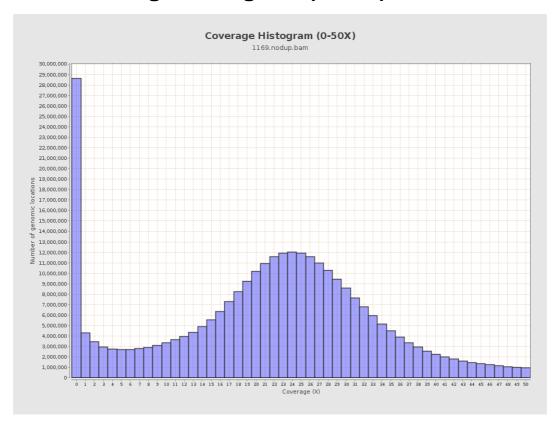


4. Results: Coverage Histogram



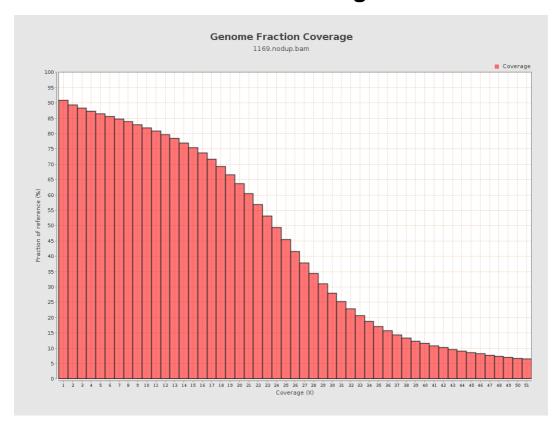


5. Results: Coverage Histogram (0-50X)



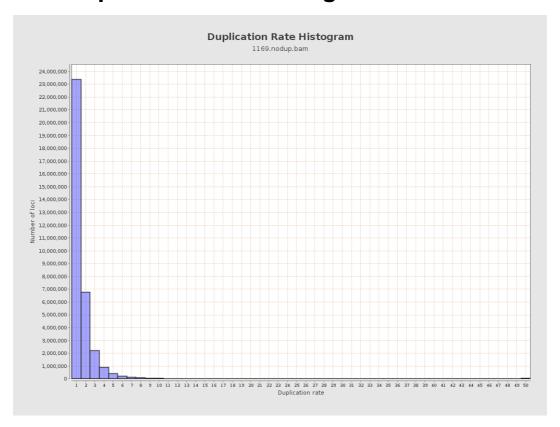


6. Results : Genome Fraction Coverage





7. Results: Duplication Rate Histogram



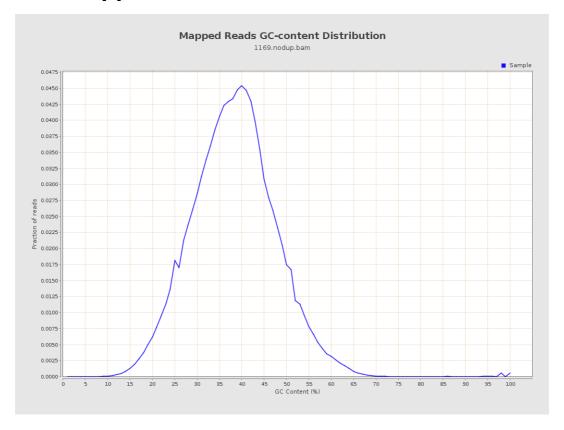


8. Results: Mapped Reads Nucleotide Content



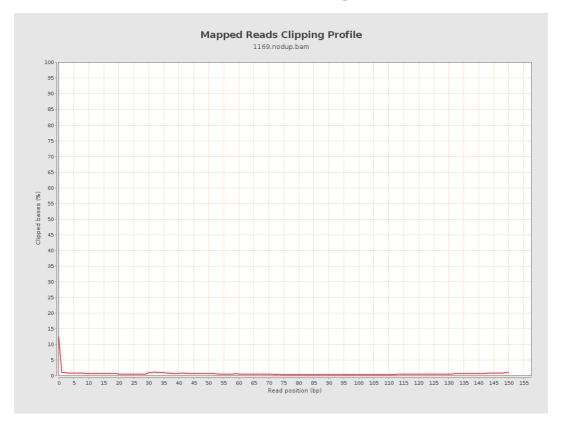


9. Results: Mapped Reads GC-content Distribution



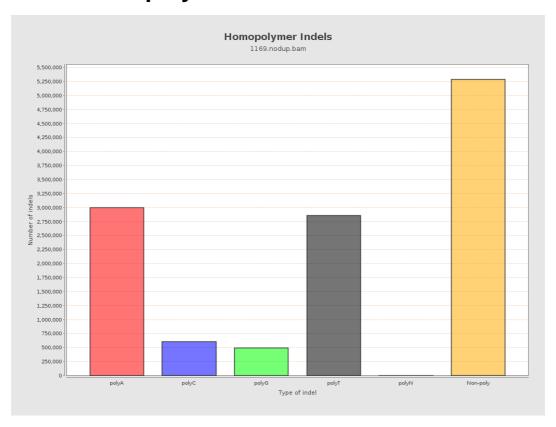


10. Results: Mapped Reads Clipping Profile



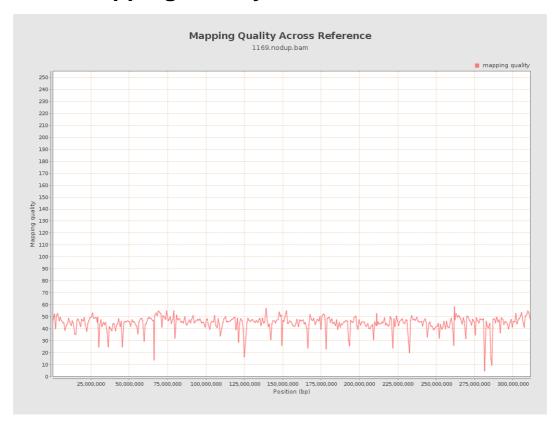


11. Results : Homopolymer Indels



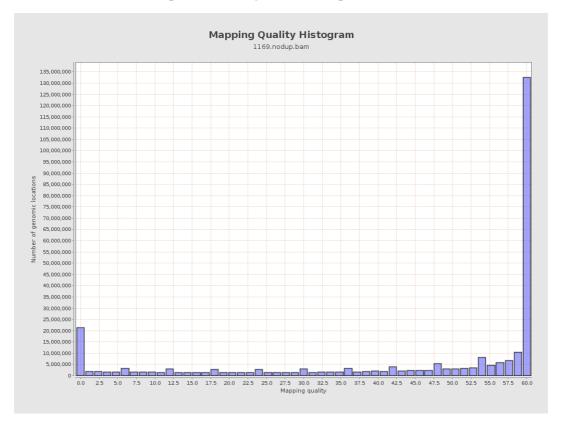


12. Results: Mapping Quality Across Reference



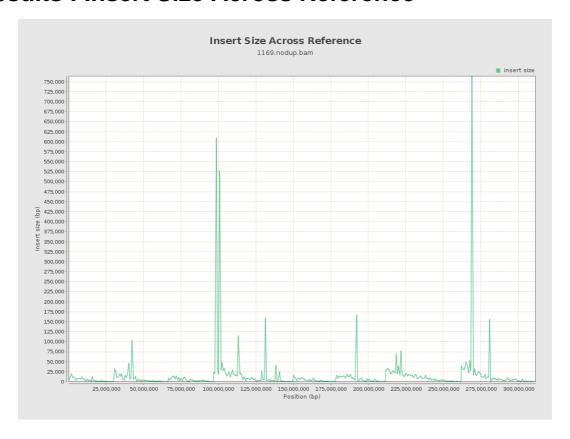


13. Results: Mapping Quality Histogram





14. Results: Insert Size Across Reference





15. Results: Insert Size Histogram

