Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.1 2023/05/29 21:39:31



1. Input data & parameters

1.1. QualiMap command line

qualimap bamqc -bam /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/800 .nodup.bam -nw 400 -hm 3

1.2. Alignment

BAM file:	/proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 800 .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_262/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_262_S343_L003 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_262/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_262_S343_L003 _R2_001.fastq.gz
Size of a homopolymer:	3
Number of windows:	400



Analysis date:	Mon May 29 21:39:31 CEST 2023
Draw chromosome limits:	no
Skip duplicate alignments:	no



2. Summary

2.1. Globals

Reference size	311,642,060
Number of reads	89,776,724
Mapped reads	84,345,338 / 93.95%
Unmapped reads	5,431,386 / 6.05%
Mapped paired reads	84,345,338 / 93.95%
Mapped reads, first in pair	42,230,325 / 47.04%
Mapped reads, second in pair	42,115,013 / 46.91%
Mapped reads, both in pair	82,586,075 / 91.99%
Mapped reads, singletons	1,759,263 / 1.96%
Read min/max/mean length	30 / 151 / 147.87
Duplicated reads (flagged)	13,696,094 / 15.26%
Clipped reads	20,851,270 / 23.23%

2.2. ACGT Content

Number/percentage of A's	3,557,261,371 / 30.8%
Number/percentage of C's	2,216,228,533 / 19.19%
Number/percentage of T's	3,562,710,549 / 30.84%
Number/percentage of G's	2,215,034,827 / 19.18%
Number/percentage of N's	40,761 / 0%
GC Percentage	38.36%

2.3. Coverage



Mean	37.1618
Standard Deviation	346.5681

2.4. Mapping Quality

Mean Mapping Quality	44.07

2.5. Insert size

Mean	229,927.77	
Standard Deviation	2,287,892.34	
P25/Median/P75	300 / 402 / 525	

2.6. Mismatches and indels

General error rate	2.39%
Mismatches	253,905,034
Insertions	8,019,309
Mapped reads with at least one insertion	8.52%
Deletions	7,994,317
Mapped reads with at least one deletion	8.4%
Homopolymer indels	56.06%

2.7. Chromosome stats

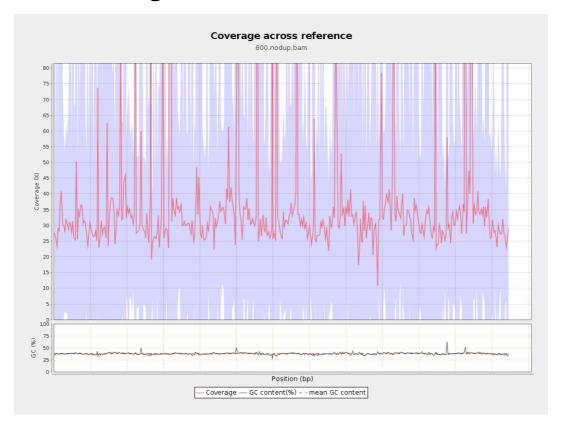
Name	Length	Mapped bases	Mean coverage	Standard deviation
LT669788.1	29724344	894783275	30.1027	121.6409



LT669789.1	36598175	1365886360	37.3212	355.7035
LT669790.1	30422129	1249518676	41.0727	360.5901
LT669791.1	52758100	1936068358	36.6971	331.1658
LT669792.1	28376109	1056113953	37.2184	358.7158
LT669793.1	33388210	1124226355	33.6714	179.6343
LT669794.1	50579949	1798319043	35.554	301.8237
LT669795.1	49795044	2156264084	43.3028	516.39

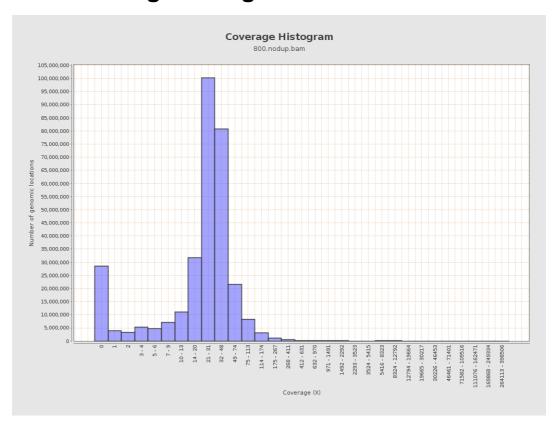


3. Results : Coverage across reference



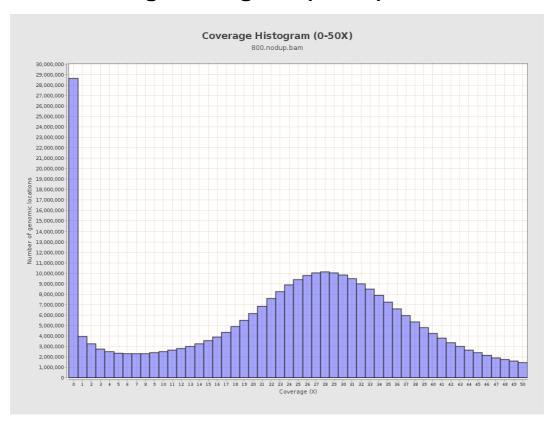


4. Results: Coverage Histogram



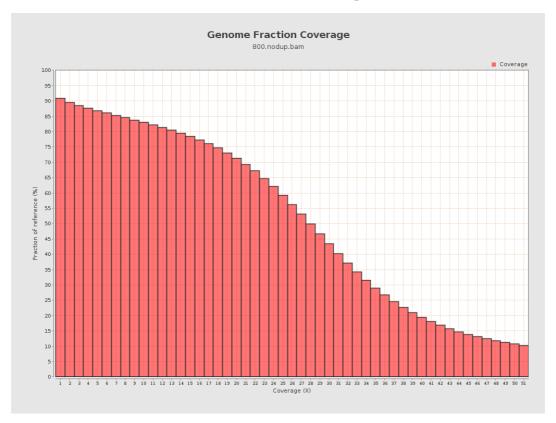


5. Results: Coverage Histogram (0-50X)



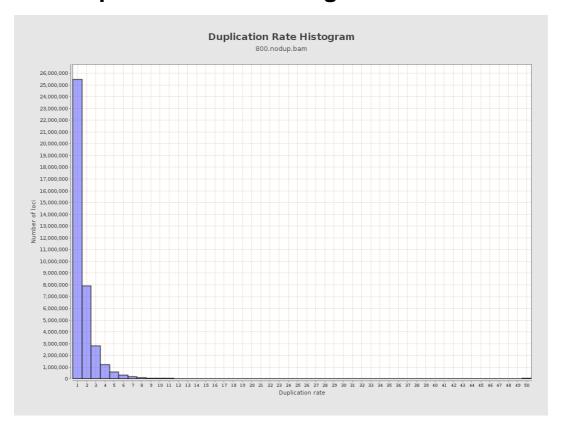


6. Results : Genome Fraction Coverage





7. Results: Duplication Rate Histogram



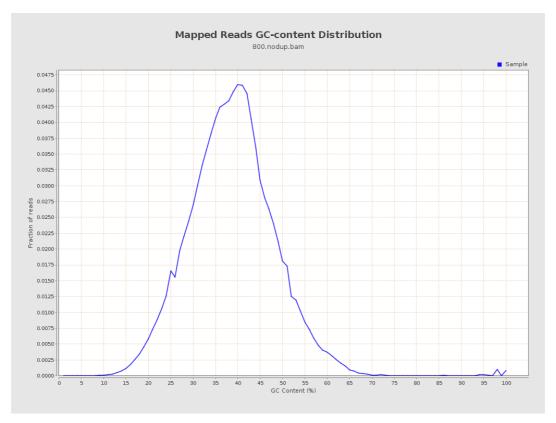


8. Results: Mapped Reads Nucleotide Content



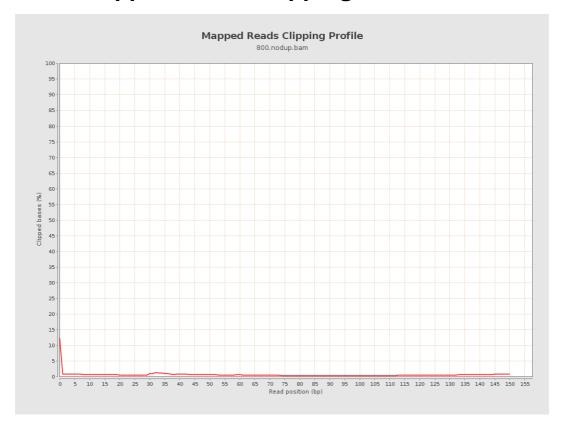


9. Results: Mapped Reads GC-content Distribution



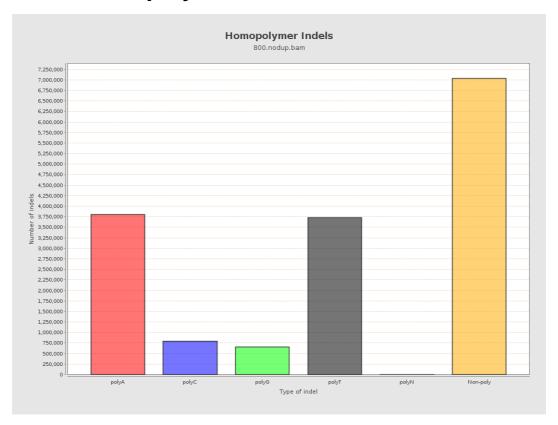


10. Results: Mapped Reads Clipping Profile





11. Results: Homopolymer Indels



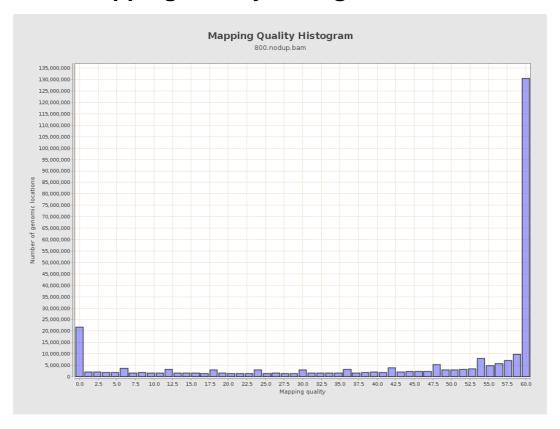


12. Results: Mapping Quality Across Reference



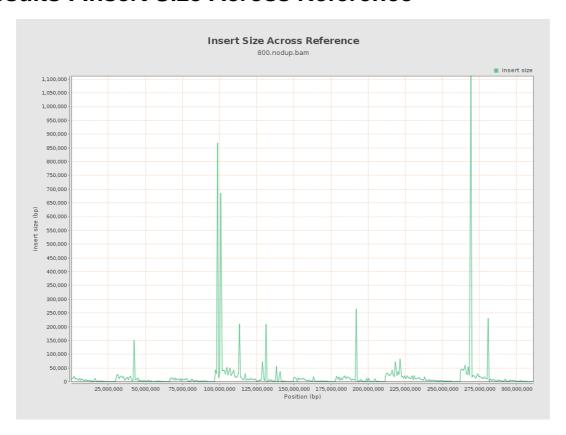


13. Results: Mapping Quality Histogram





14. Results: Insert Size Across Reference





15. Results: Insert Size Histogram

