

# Qualimap Analysis Results

*BAM QC analysis*

*Generated by Qualimap v.2.2.1*

*2023/05/29 21:31:46*

# 1. Input data & parameters

## 1.1. QualiMap command line

```
qualimap bamqc -bam
/proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/661
.nodup.bam -nw 400 -hm 3
```

## 1.2. Alignment

BAM file:	/proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 661 .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_174/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_174_S264_L002 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_174/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_174_S264_L002 _R2_001.fastq.gz
Size of a homopolymer:	3
Number of windows:	400

Analysis date:	Mon May 29 21:31:45 CEST 2023
Draw chromosome limits:	no
Skip duplicate alignments:	no

## 2. Summary

### 2.1. Globals

Reference size	311,642,060
Number of reads	67,784,088
Mapped reads	62,891,598 / 92.78%
Unmapped reads	4,892,490 / 7.22%
Mapped paired reads	62,891,598 / 92.78%
Mapped reads, first in pair	31,525,837 / 46.51%
Mapped reads, second in pair	31,365,761 / 46.27%
Mapped reads, both in pair	61,412,495 / 90.6%
Mapped reads, singletons	1,479,103 / 2.18%
Read min/max/mean length	30 / 151 / 148.16
Duplicated reads (flagged)	10,854,460 / 16.01%
Clipped reads	14,206,439 / 20.96%

### 2.2. ACGT Content

Number/percentage of A's	2,687,344,809 / 30.82%
Number/percentage of C's	1,672,328,893 / 19.18%
Number/percentage of T's	2,692,439,439 / 30.88%
Number/percentage of G's	1,667,046,382 / 19.12%
Number/percentage of N's	36,608 / 0%
GC Percentage	38.3%

### 2.3. Coverage

Mean	28.0518
Standard Deviation	228.7091

## 2.4. Mapping Quality

Mean Mapping Quality	43.67
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## 2.5. Insert size

Mean	255,269.35
Standard Deviation	2,406,186.67
P25/Median/P75	359 / 470 / 619

## 2.6. Mismatches and indels

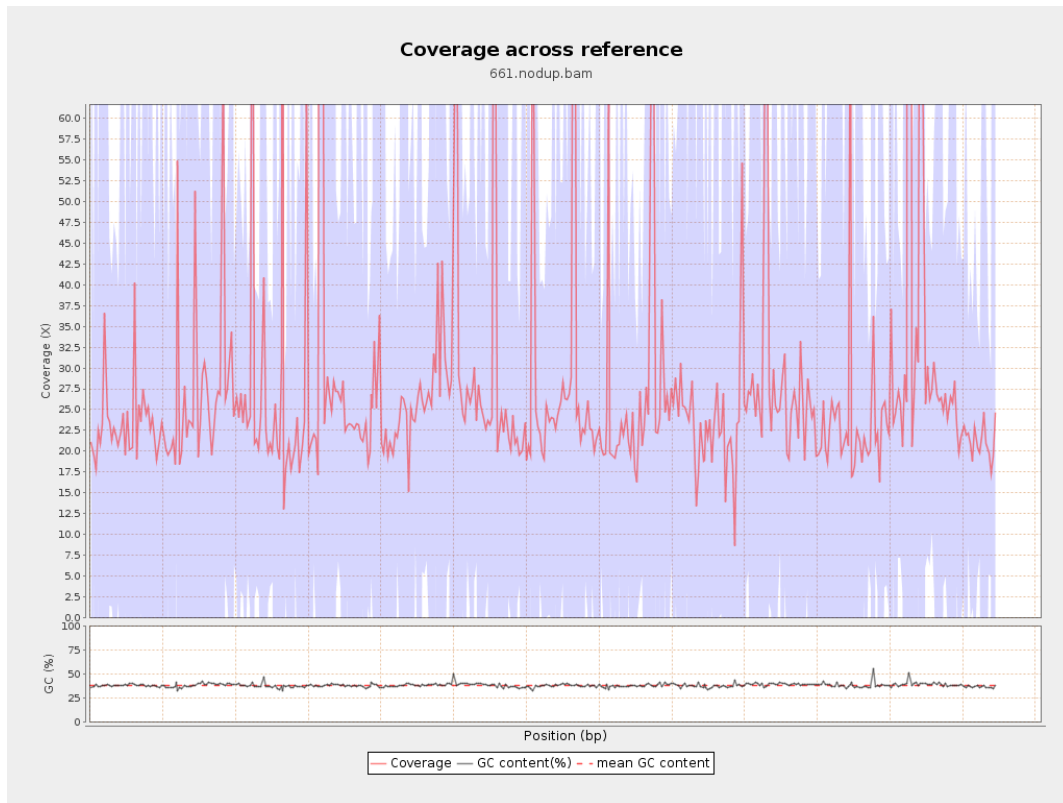
General error rate	2.38%
Mismatches	191,173,783
Insertions	6,022,779
Mapped reads with at least one insertion	8.6%
Deletions	6,076,683
Mapped reads with at least one deletion	8.55%
Homopolymer indels	56.21%

## 2.7. Chromosome stats

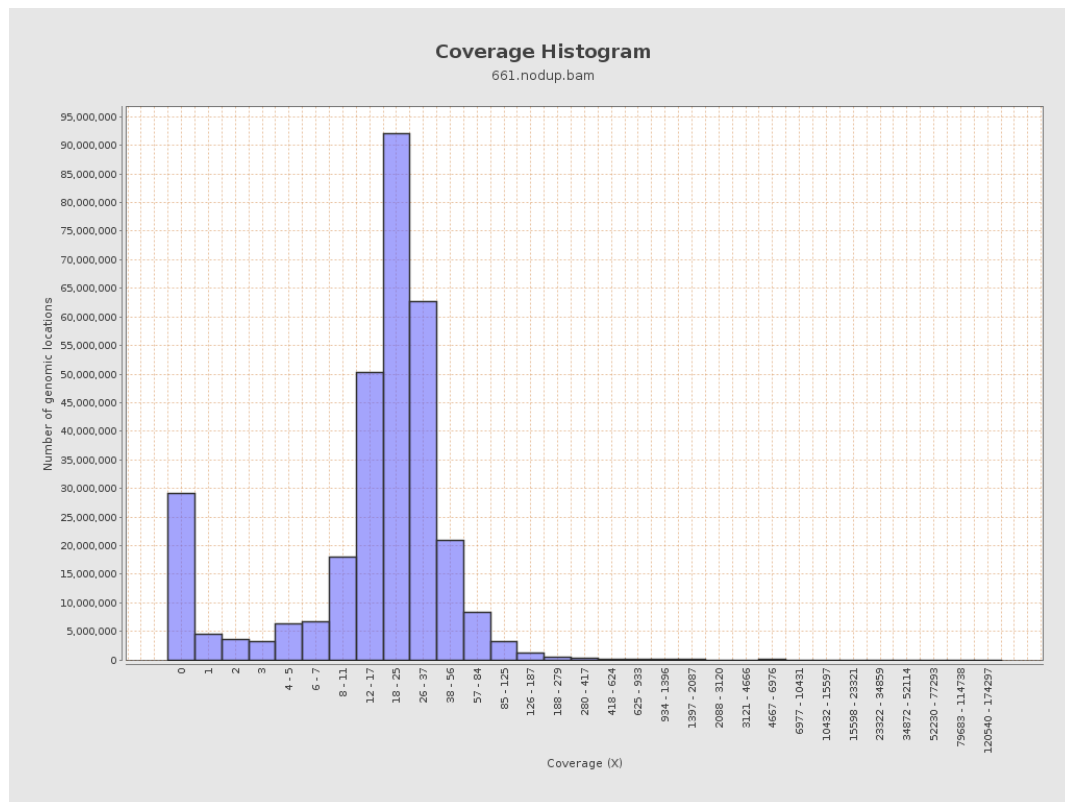
Name	Length	Mapped bases	Mean coverage	Standard deviation
LT669788.1	29724344	678186616	22.8159	70.7954

LT669789.1	36598175	1051321056	28.7261	246.2749
LT669790.1	30422129	913731415	30.0351	242.1017
LT669791.1	52758100	1469029777	27.8446	210.8723
LT669792.1	28376109	783327149	27.6052	288.454
LT669793.1	33388210	878404896	26.3088	168.0781
LT669794.1	50579949	1349967499	26.6898	202.3615
LT669795.1	49795044	1618143799	32.4961	298.1283

### 3. Results : Coverage across reference

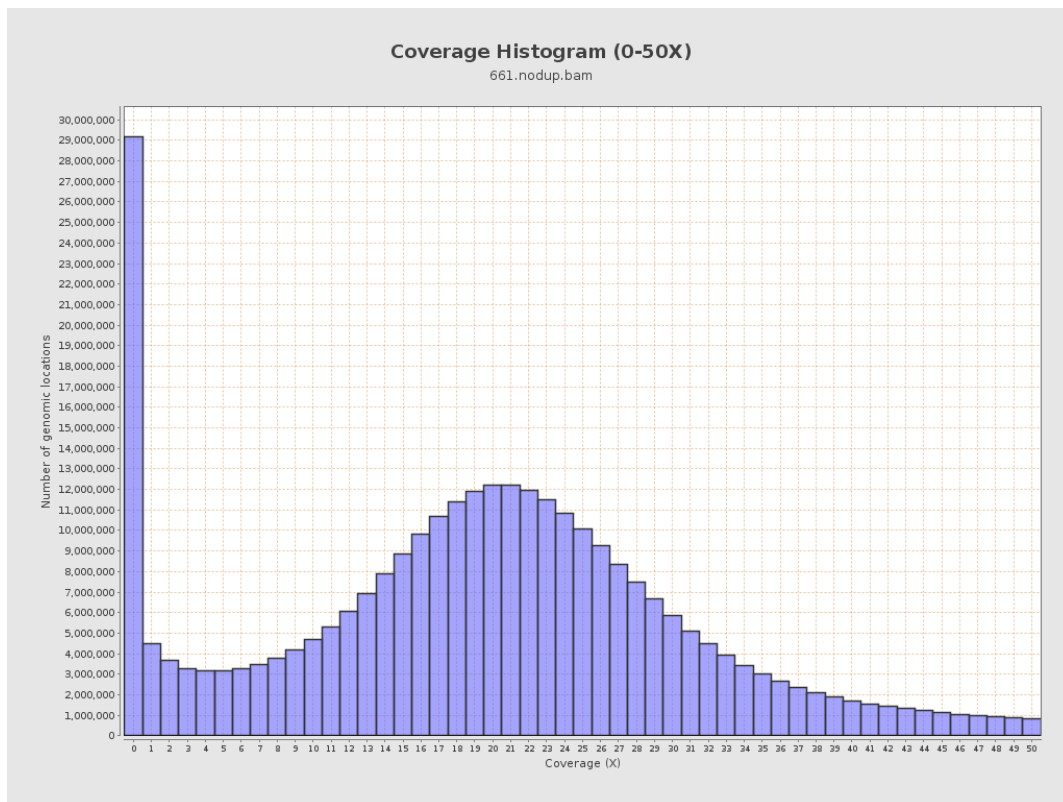


## 4. Results : Coverage Histogram

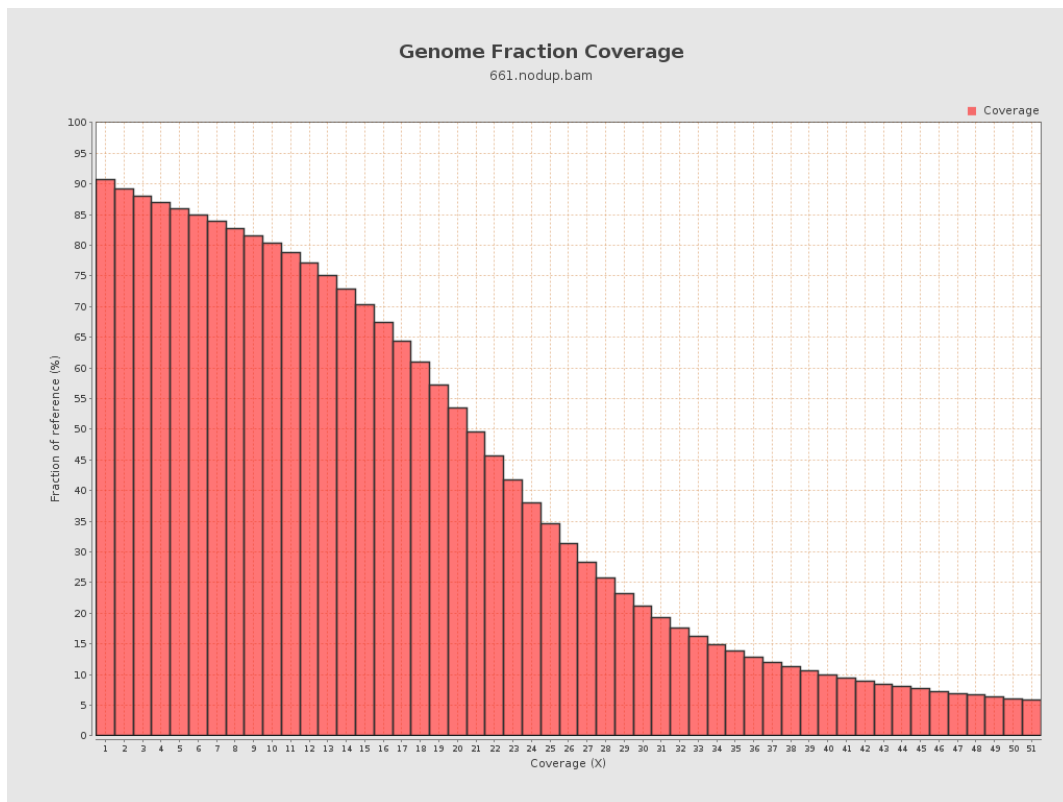




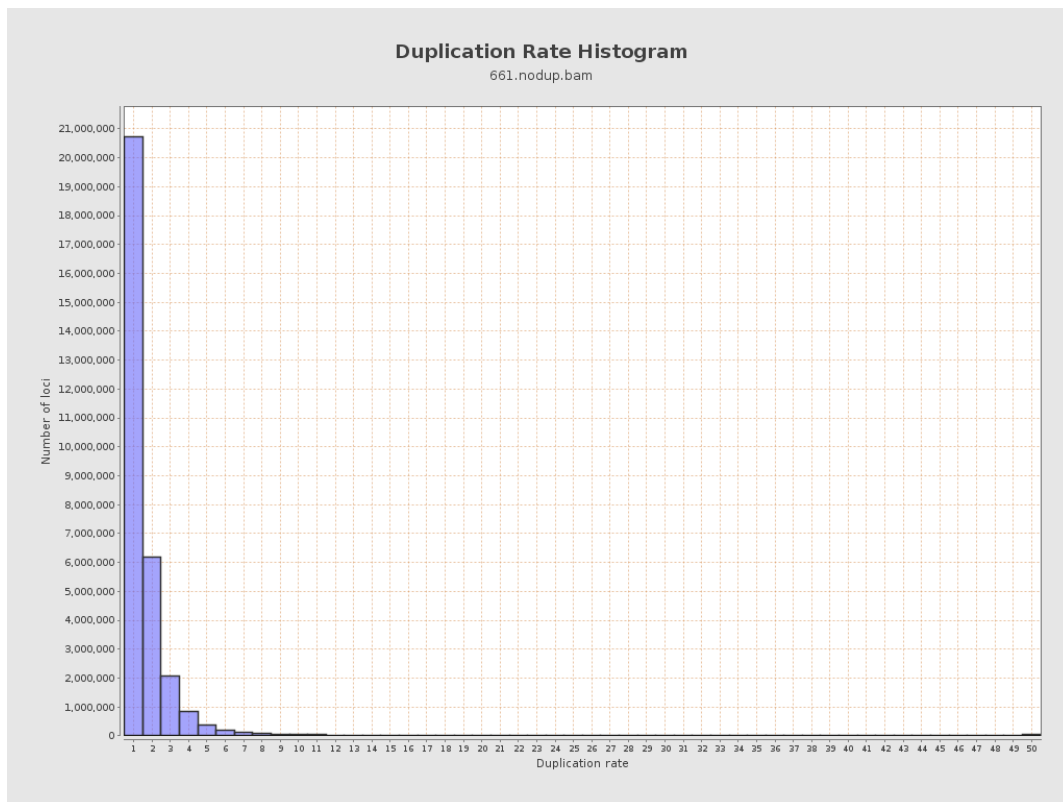
## 5. Results : Coverage Histogram (0-50X)



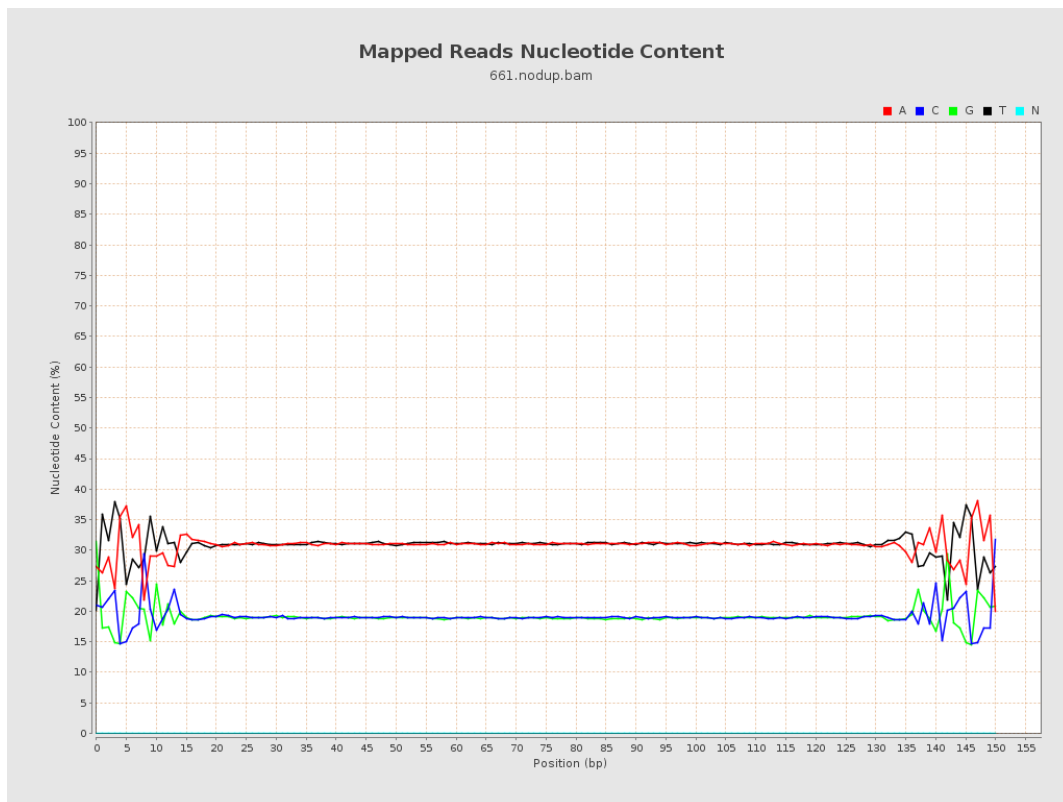
## 6. Results : Genome Fraction Coverage



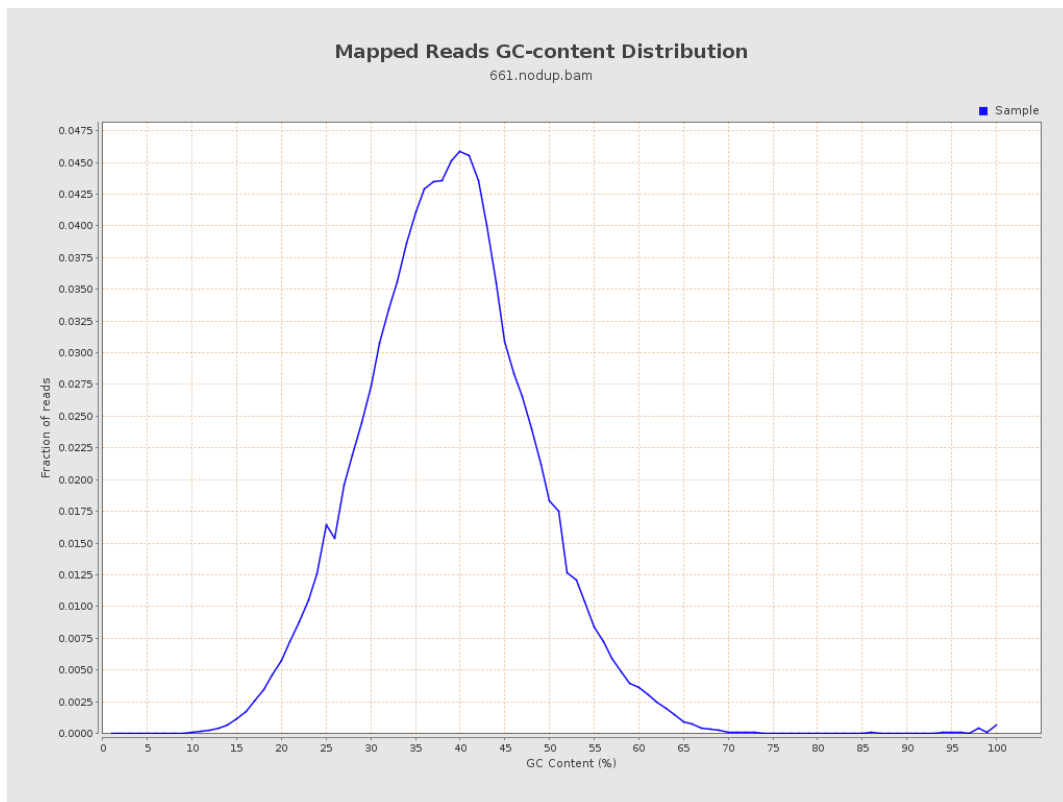
## 7. Results : Duplication Rate Histogram



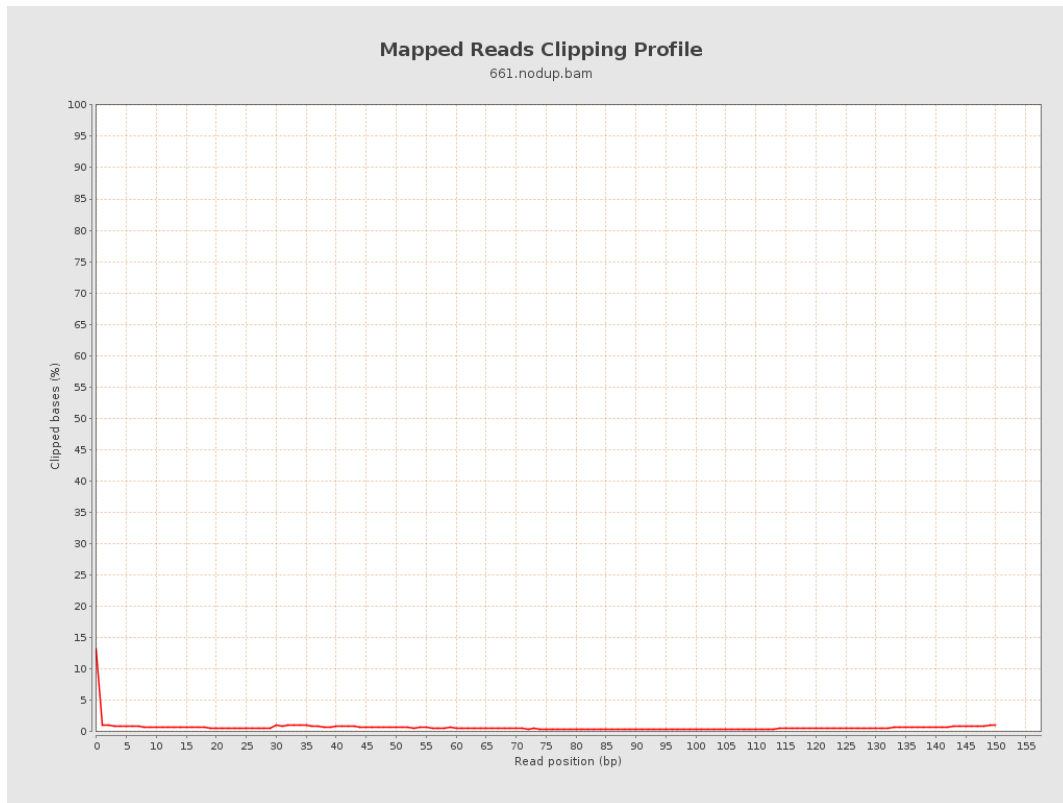
## 8. Results : Mapped Reads Nucleotide Content



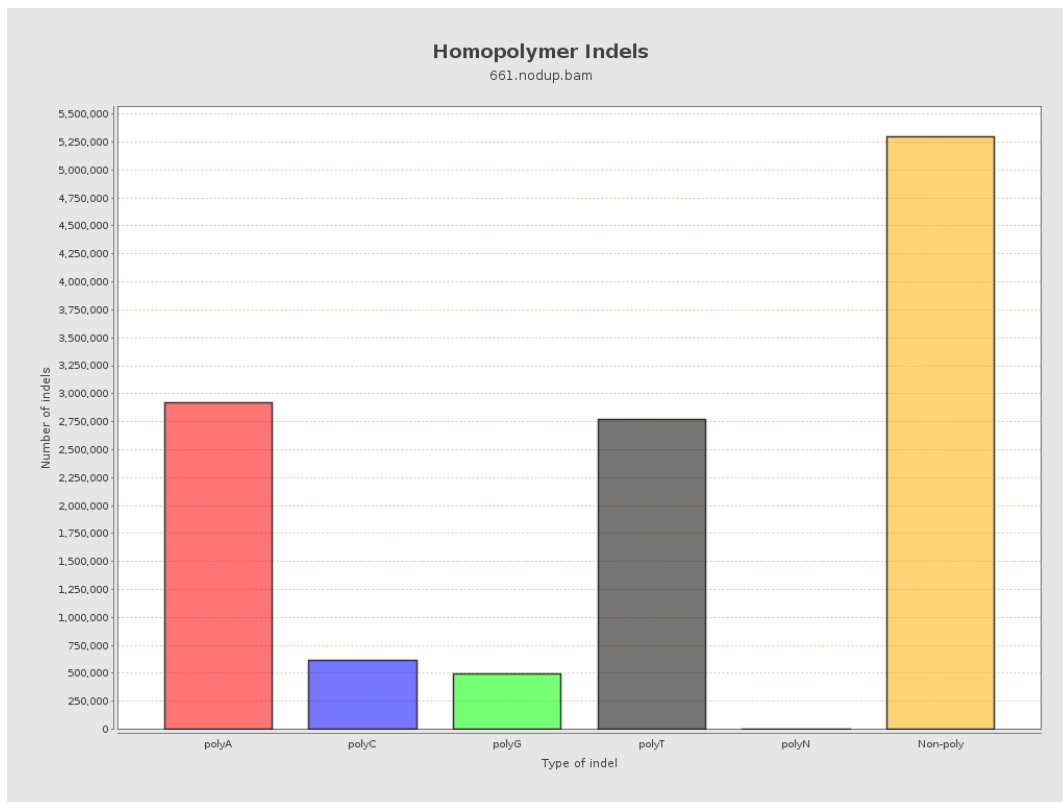
## 9. Results : Mapped Reads GC-content Distribution



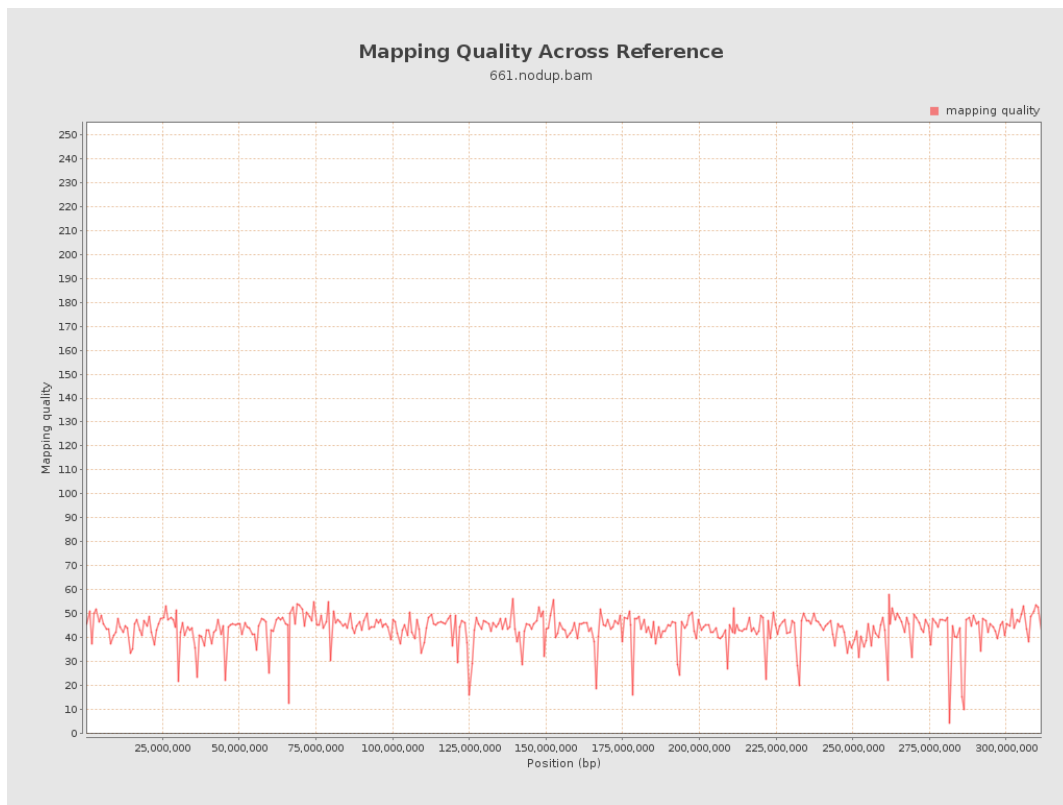
## 10. Results : Mapped Reads Clipping Profile



## 11. Results : Homopolymer Indels

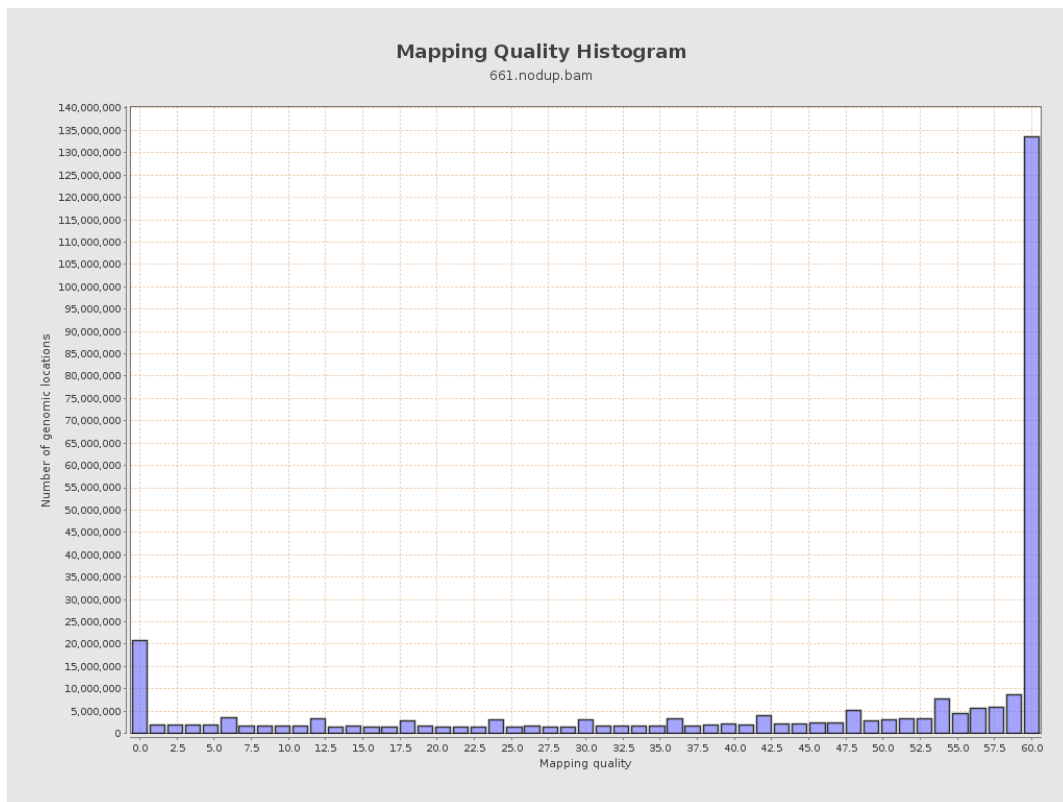


## 12. Results : Mapping Quality Across Reference

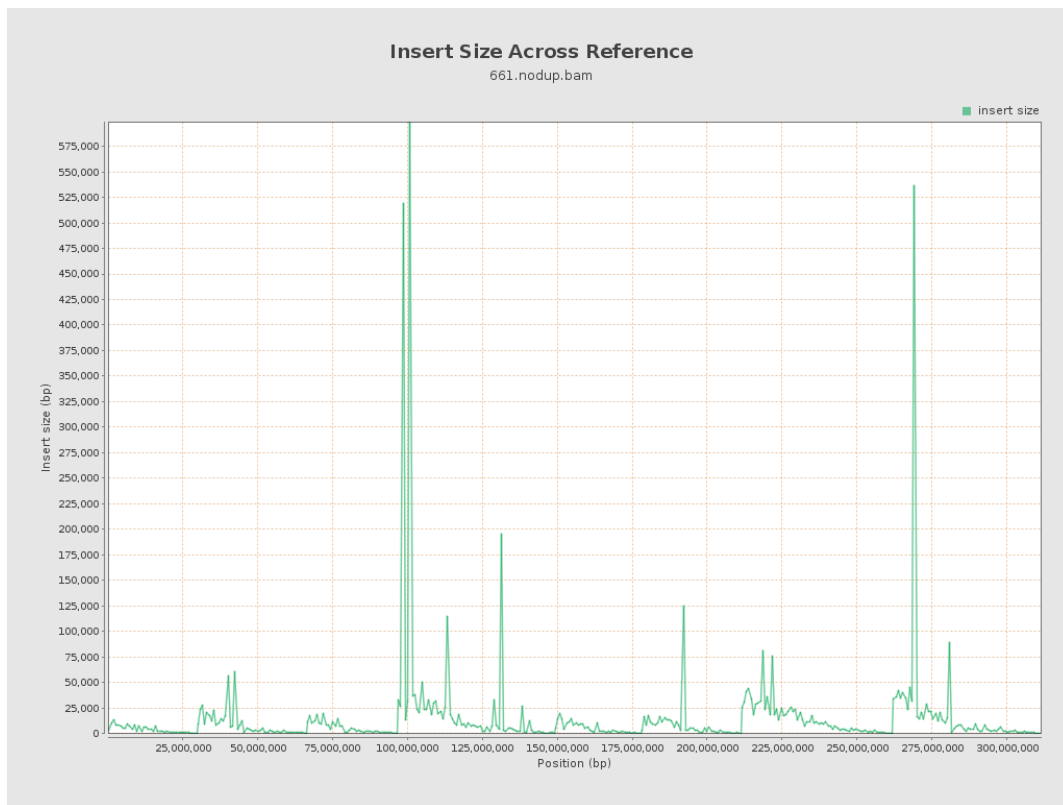




## 13. Results : Mapping Quality Histogram



## 14. Results : Insert Size Across Reference



## 15. Results : Insert Size Histogram

