

# Qualimap Analysis Results

*BAM QC analysis*

*Generated by Qualimap v.2.2.1*

*2023/05/29 21:54:19*

# 1. Input data & parameters

## 1.1. QualiMap command line

```
qualimap bamqc -bam
/proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/397
O
.nodup.bam -nw 400 -hm 3
```

## 1.2. Alignment

BAM file:	/proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/397O.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\tSM:\$sample /proj/uppstore2018210/Aalpina/data/reference/GCA_900128785.1_MPIPZ.v5_genomic.fa /proj/uppstore2018210/Aalpina/data/rawdata/P26207/P26207_591/02-FASTQ/220906_A00187_0838_AHMG3KDSX3/P26207_591_S158_L004_R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/rawdata/P26207/P26207_591/02-FASTQ/220906_A00187_0838_AHMG3KDSX3/P26207_591_S158_L004_R2_001.fastq.gz
Size of a homopolymer:	3

Number of windows:	400
Analysis date:	Mon May 29 21:54:18 CEST 2023
Draw chromosome limits:	no
Skip duplicate alignments:	no

## 2. Summary

### 2.1. Globals

Reference size	311,642,060
Number of reads	124,433,763
Mapped reads	117,172,252 / 94.16%
Unmapped reads	7,261,511 / 5.84%
Mapped paired reads	117,172,252 / 94.16%
Mapped reads, first in pair	58,759,665 / 47.22%
Mapped reads, second in pair	58,412,587 / 46.94%
Mapped reads, both in pair	114,763,393 / 92.23%
Mapped reads, singletons	2,408,859 / 1.94%
Read min/max/mean length	30 / 151 / 148.17
Duplicated reads (flagged)	19,941,917 / 16.03%
Clipped reads	26,399,895 / 21.22%

### 2.2. ACGT Content

Number/percentage of A's	5,008,972,077 / 30.81%
Number/percentage of C's	3,122,097,561 / 19.2%
Number/percentage of T's	5,018,721,302 / 30.87%
Number/percentage of G's	3,110,160,955 / 19.13%
Number/percentage of N's	89,681 / 0%
GC Percentage	38.33%

### 2.3. Coverage

Mean	52.3087
Standard Deviation	391.4011

## 2.4. Mapping Quality

Mean Mapping Quality	44.11
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## 2.5. Insert size

Mean	226,127.08
Standard Deviation	2,256,832.1
P25/Median/P75	328 / 434 / 570

## 2.6. Mismatches and indels

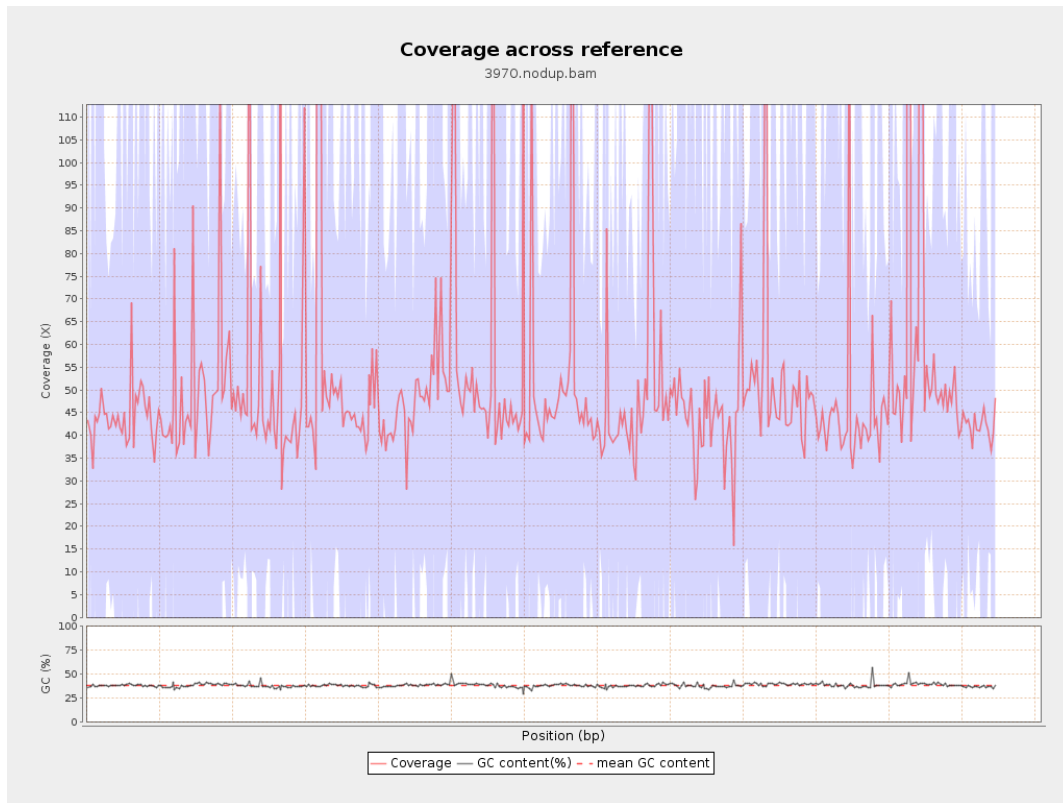
General error rate	2.4%
Mismatches	360,118,875
Insertions	10,692,866
Mapped reads with at least one insertion	8.21%
Deletions	10,965,378
Mapped reads with at least one deletion	8.31%
Homopolymer indels	56.21%

## 2.7. Chromosome stats

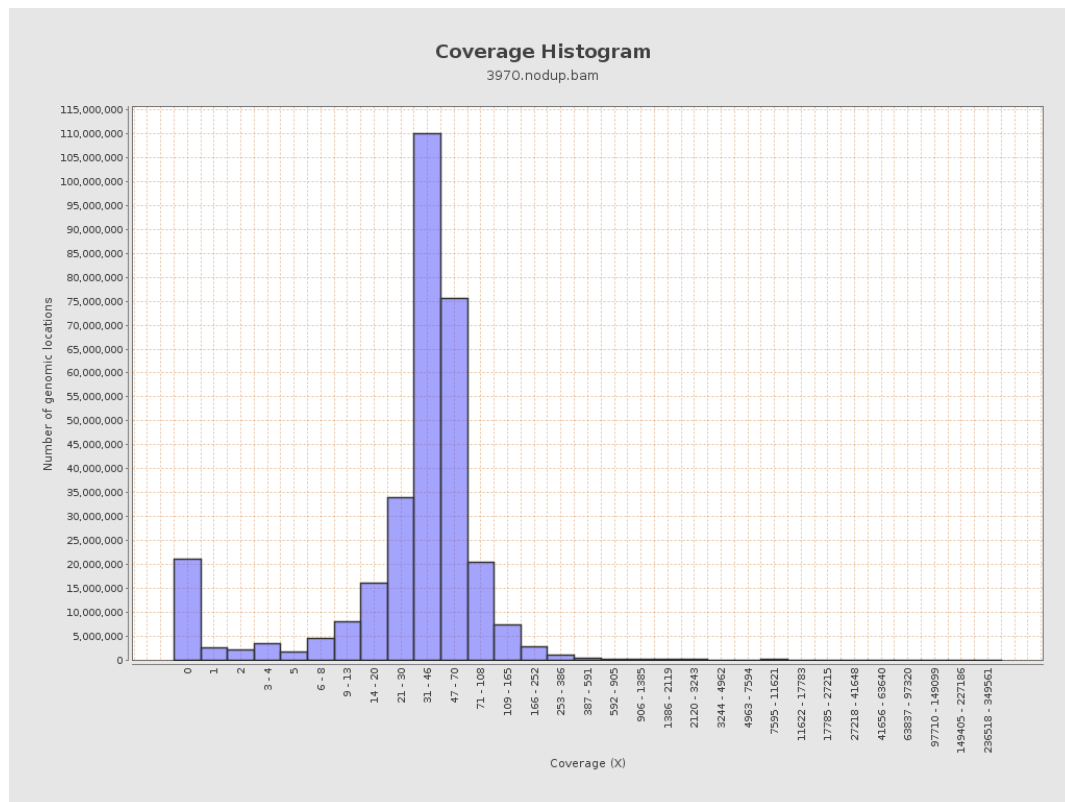
Name	Length	Mapped bases	Mean coverage	Standard deviation
LT669788.1	29724344	1296765766	43.6264	115.3269

LT669789.1	36598175	1929789130	52.7291	402.032
LT669790.1	30422129	1683774716	55.347	380.3842
LT669791.1	52758100	2722770252	51.6086	342.1612
LT669792.1	28376109	1461487930	51.5042	436.2785
LT669793.1	33388210	1622947997	48.6084	276.2511
LT669794.1	50579949	2491525314	49.2592	334.7993
LT669795.1	49795044	3092528522	62.1051	588.1633

### 3. Results : Coverage across reference

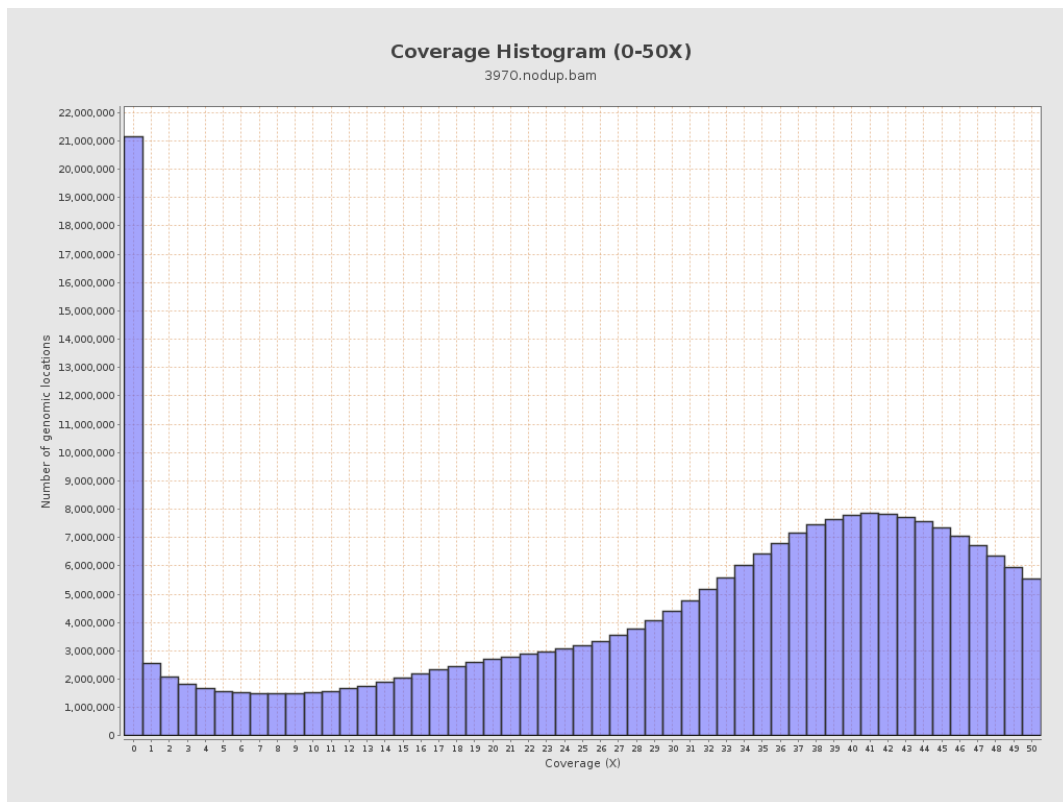


## 4. Results : Coverage Histogram

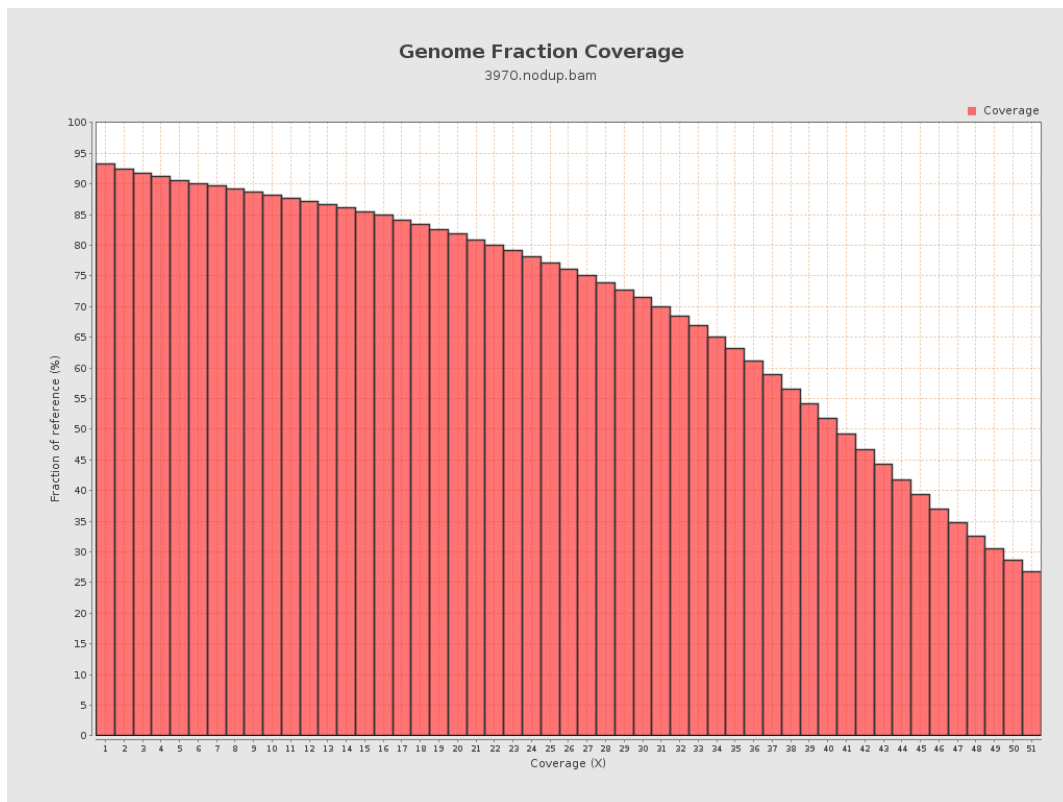




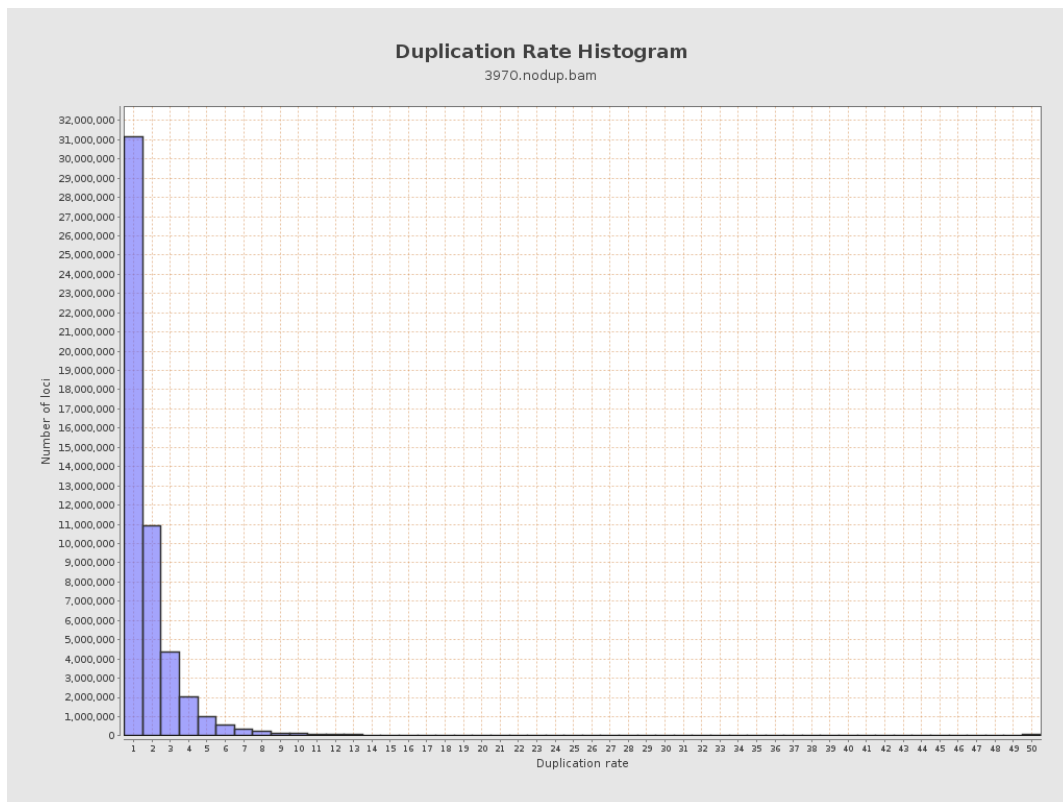
## 5. Results : Coverage Histogram (0-50X)



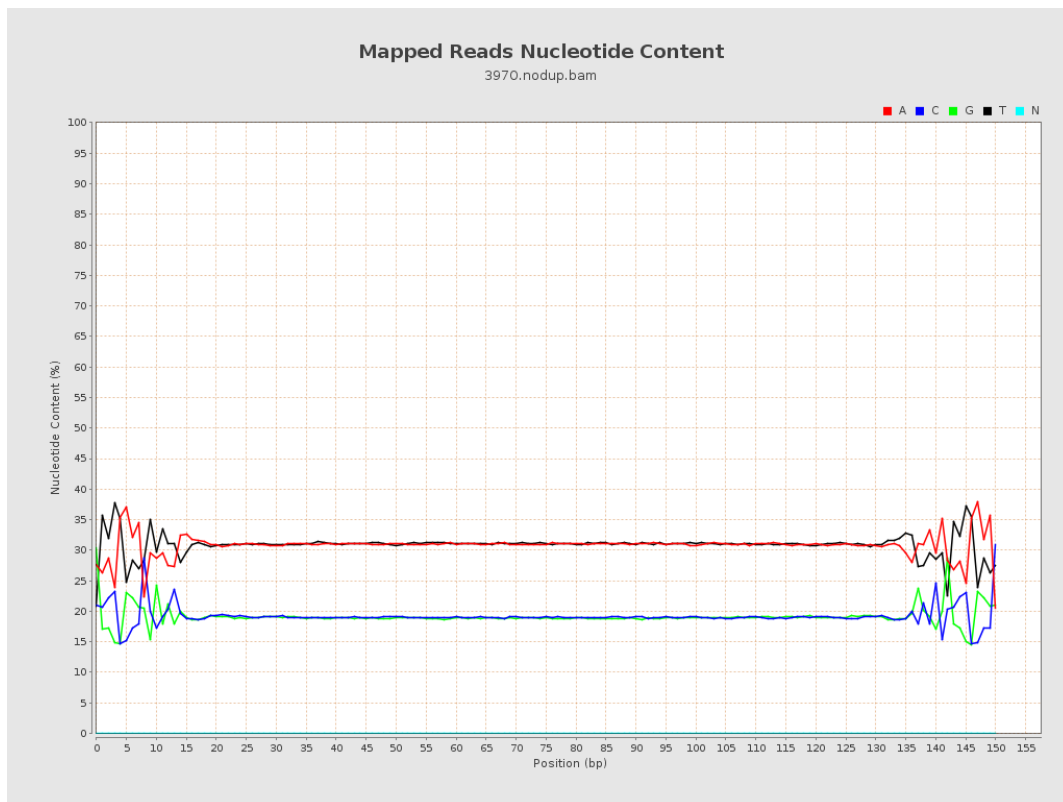
## 6. Results : Genome Fraction Coverage



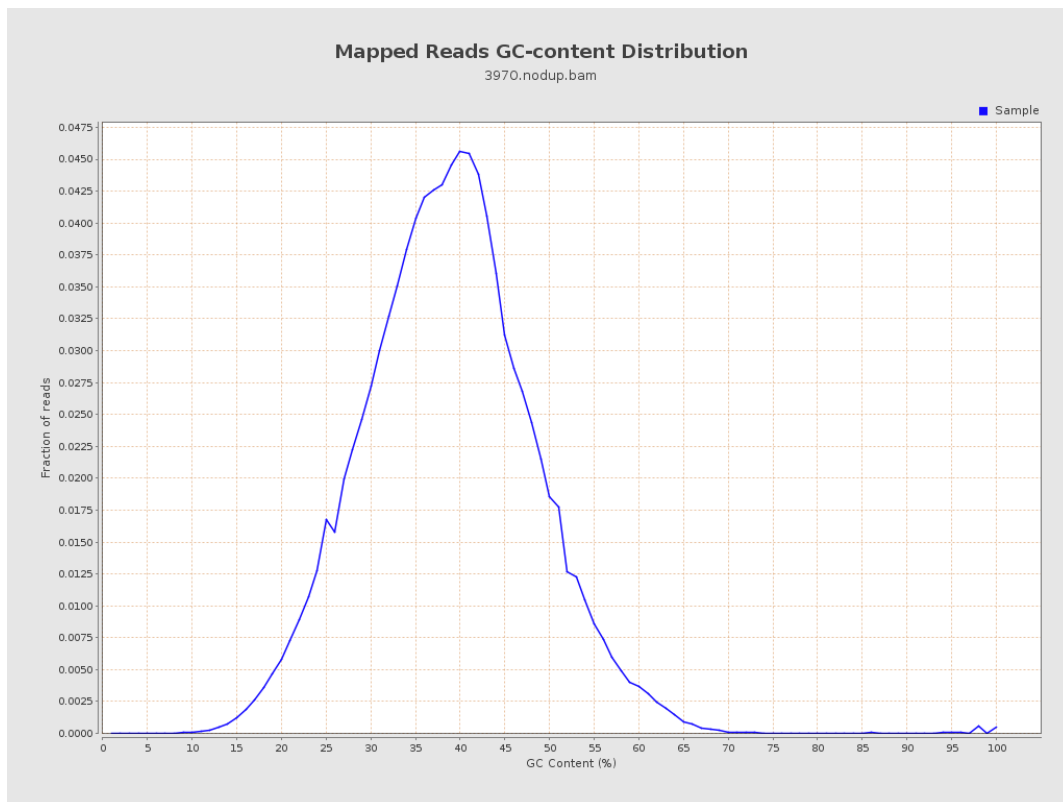
## 7. Results : Duplication Rate Histogram



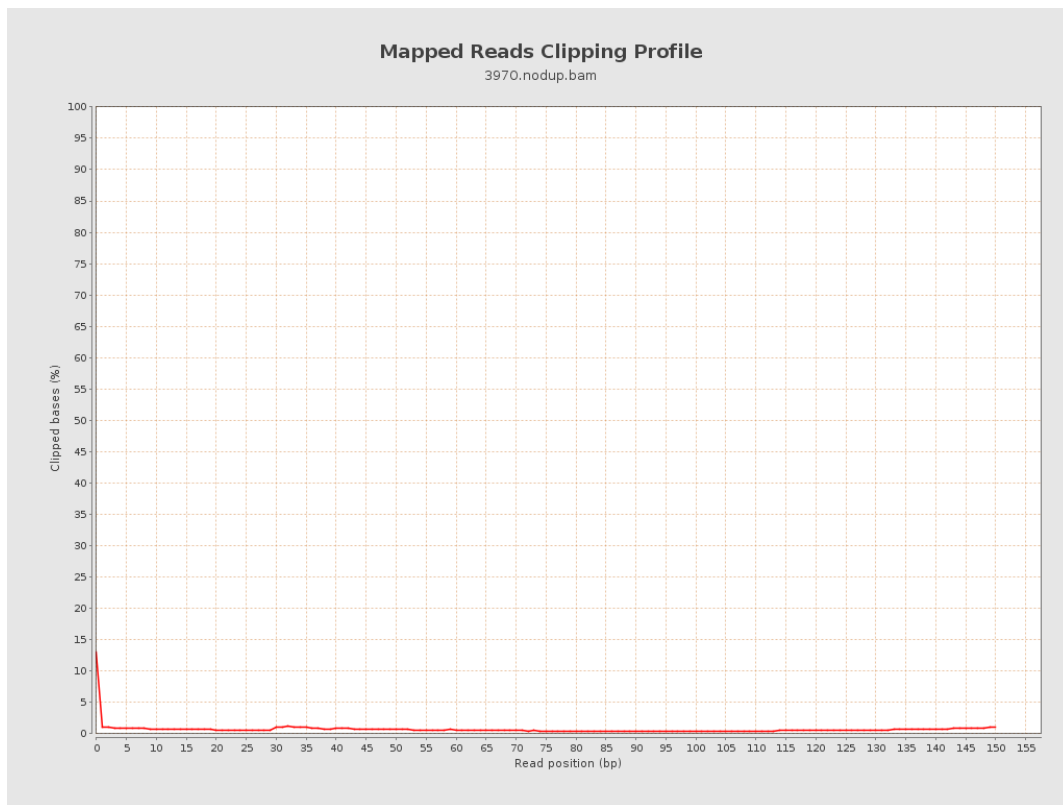
## 8. Results : Mapped Reads Nucleotide Content



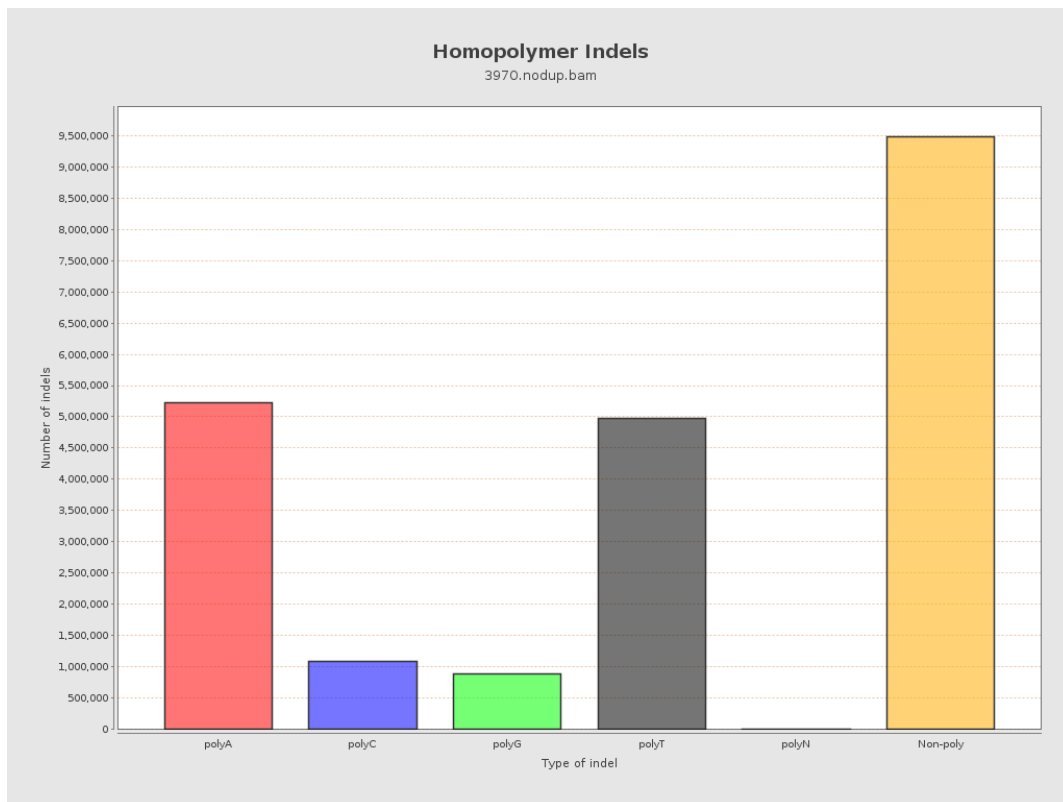
## 9. Results : Mapped Reads GC-content Distribution



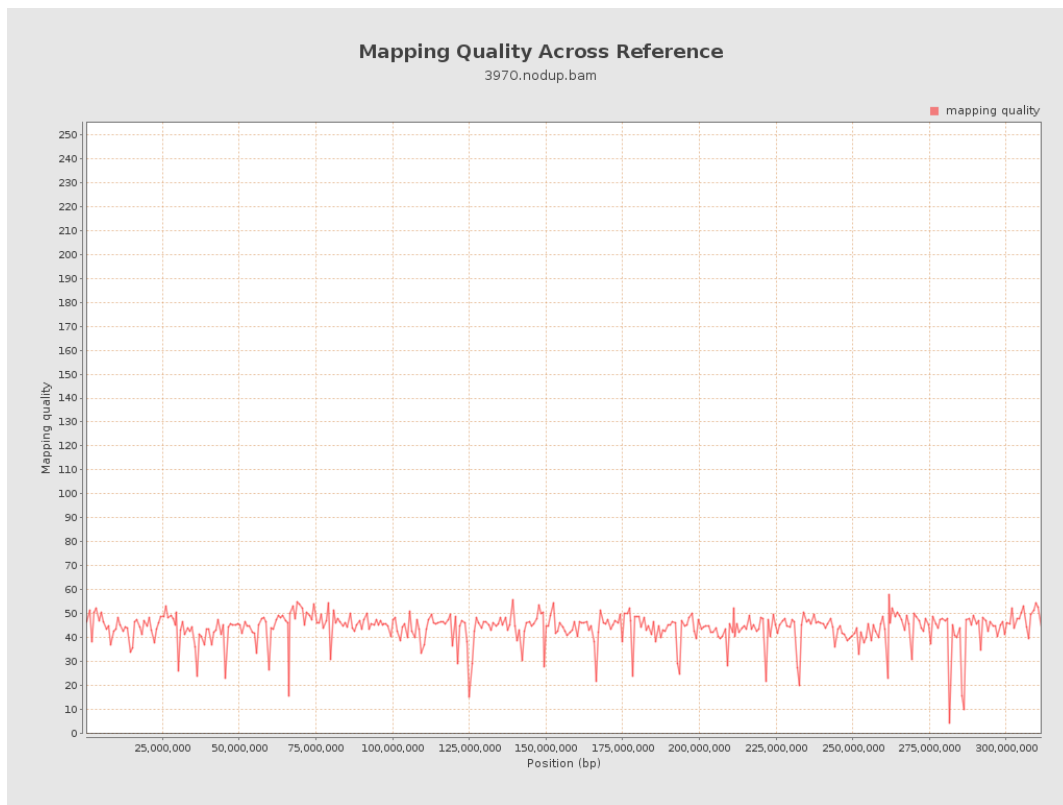
## 10. Results : Mapped Reads Clipping Profile



## 11. Results : Homopolymer Indels

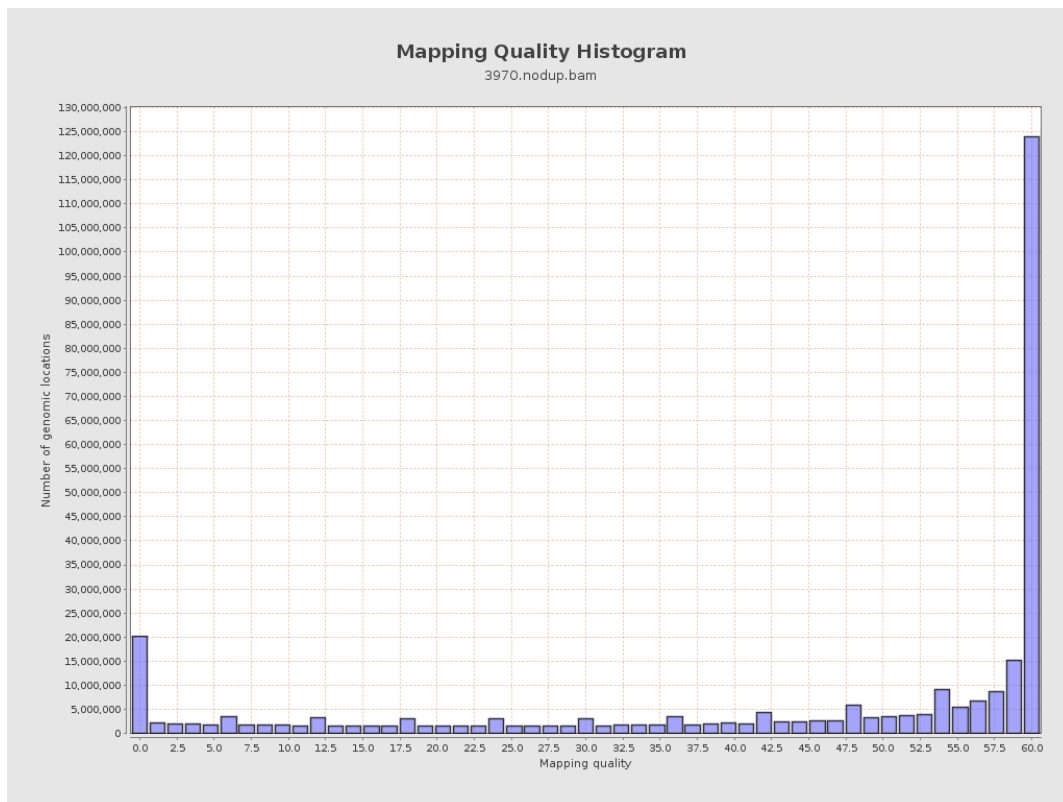


## 12. Results : Mapping Quality Across Reference

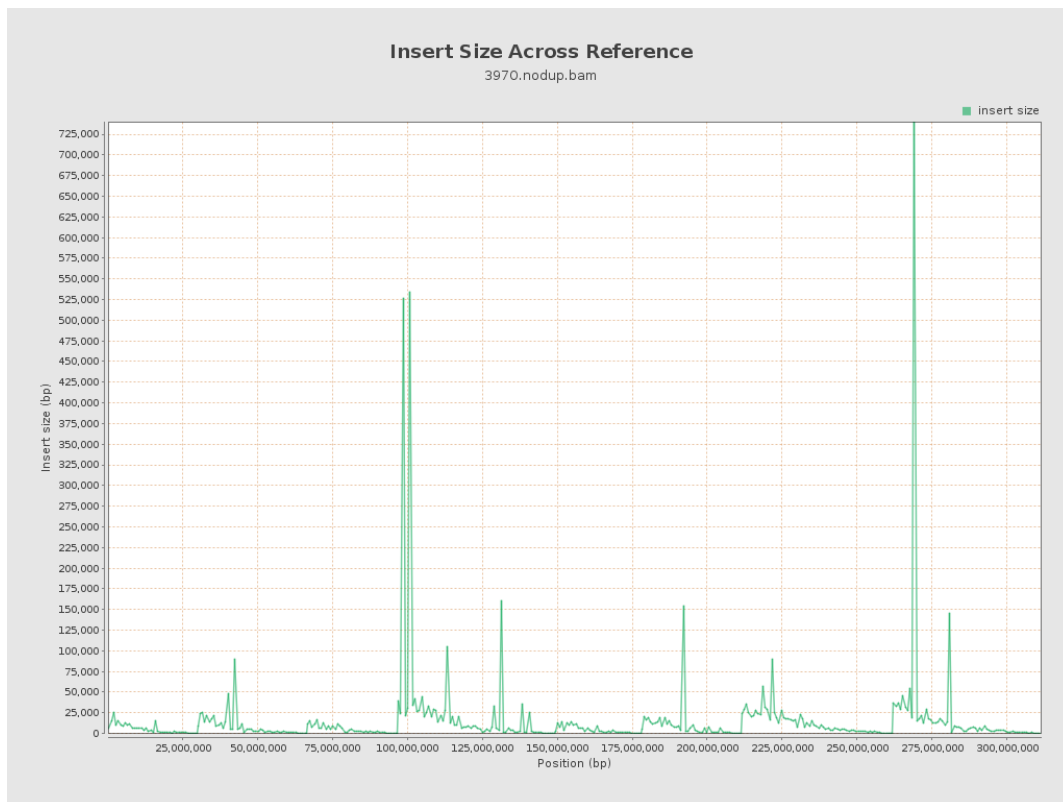




## 13. Results : Mapping Quality Histogram



## 14. Results : Insert Size Across Reference



## 15. Results : Insert Size Histogram

