

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2023/05/29 21:32:46

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/596
.nodup.bam -nw 400 -hm 3
```

1.2. Alignment

| | |
|---------------------------------------|---|
| BAM file: | /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/596 .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/awdata/P26207/P26207_488/02-FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_488_S463_L004_R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/awdata/P26207/P26207_488/02-FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_488_S463_L004_R2_001.fastq.gz |
| Size of a homopolymer: | 3 |
| Number of windows: | 400 |

| | |
|----------------------------|-------------------------------|
| Analysis date: | Mon May 29 21:32:46 CEST 2023 |
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |

2. Summary

2.1. Globals

| | |
|------------------------------|---------------------|
| Reference size | 311,642,060 |
| Number of reads | 72,885,411 |
| Mapped reads | 66,501,996 / 91.24% |
| Unmapped reads | 6,383,415 / 8.76% |
| Mapped paired reads | 66,501,996 / 91.24% |
| Mapped reads, first in pair | 33,299,449 / 45.69% |
| Mapped reads, second in pair | 33,202,547 / 45.55% |
| Mapped reads, both in pair | 64,428,785 / 88.4% |
| Mapped reads, singletons | 2,073,211 / 2.84% |
| Read min/max/mean length | 30 / 151 / 148.21 |
| Duplicated reads (flagged) | 12,027,472 / 16.5% |
| Clipped reads | 15,066,650 / 20.67% |

2.2. ACGT Content

| | |
|--------------------------|------------------------|
| Number/percentage of A's | 2,828,646,702 / 30.87% |
| Number/percentage of C's | 1,752,371,306 / 19.12% |
| Number/percentage of T's | 2,833,341,166 / 30.92% |
| Number/percentage of G's | 1,749,320,192 / 19.09% |
| Number/percentage of N's | 30,417 / 0% |
| GC Percentage | 38.21% |

2.3. Coverage

| | |
|--------------------|----------|
| Mean | 29.4796 |
| Standard Deviation | 279.2221 |

2.4. Mapping Quality

| | |
|----------------------|-------|
| Mean Mapping Quality | 44.27 |
|----------------------|-------|

2.5. Insert size

| | |
|--------------------|-----------------|
| Mean | 255,038.07 |
| Standard Deviation | 2,431,669.4 |
| P25/Median/P75 | 331 / 431 / 564 |

2.6. Mismatches and indels

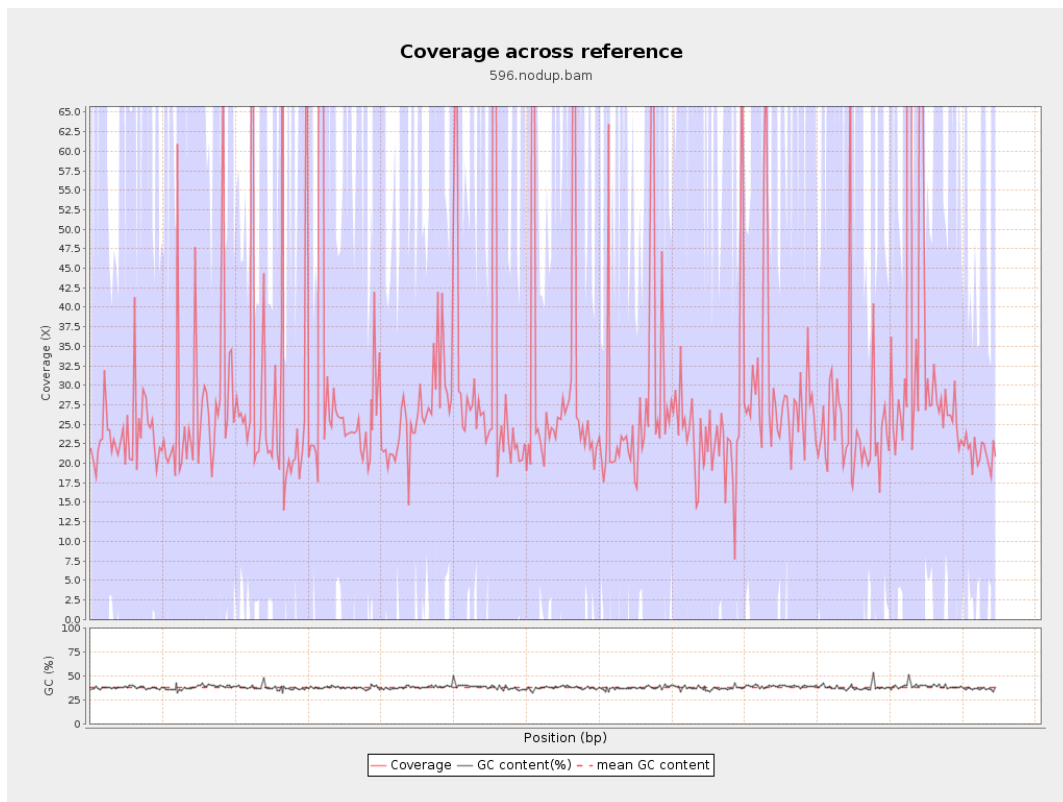
| | |
|--|-------------|
| General error rate | 2.3% |
| Mismatches | 192,707,050 |
| Insertions | 6,598,749 |
| Mapped reads with at least one insertion | 8.84% |
| Deletions | 6,289,082 |
| Mapped reads with at least one deletion | 8.4% |
| Homopolymer indels | 57.37% |

2.7. Chromosome stats

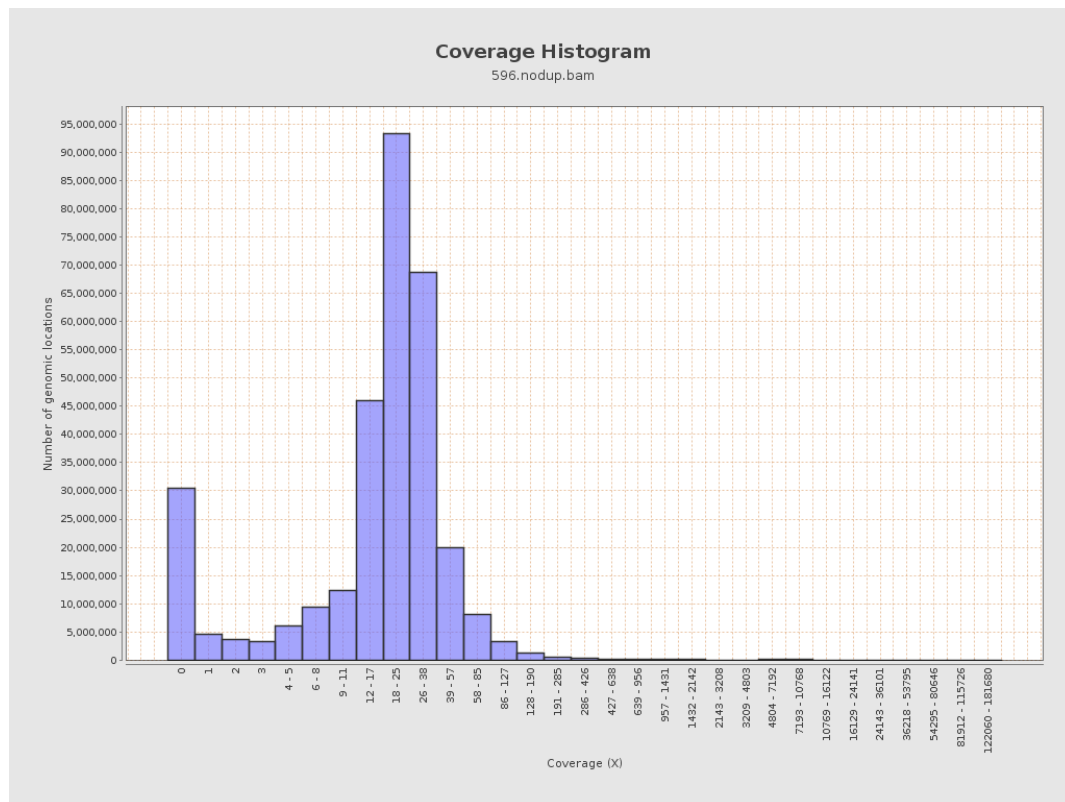
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|---------------|--------------------|
| LT669788.1 | 29724344 | 691448746 | 23.262 | 107.049 |
| | | | | |

| | | | | |
|------------|----------|------------|---------|----------|
| LT669789.1 | 36598175 | 1085818259 | 29.6686 | 306.578 |
| LT669790.1 | 30422129 | 1058118711 | 34.7812 | 391.7069 |
| LT669791.1 | 52758100 | 1547489569 | 29.3318 | 298.8683 |
| LT669792.1 | 28376109 | 822617355 | 28.9898 | 292.8588 |
| LT669793.1 | 33388210 | 898854321 | 26.9213 | 185.2418 |
| LT669794.1 | 50579949 | 1415795228 | 27.9912 | 223.563 |
| LT669795.1 | 49795044 | 1666931554 | 33.4759 | 317.6964 |

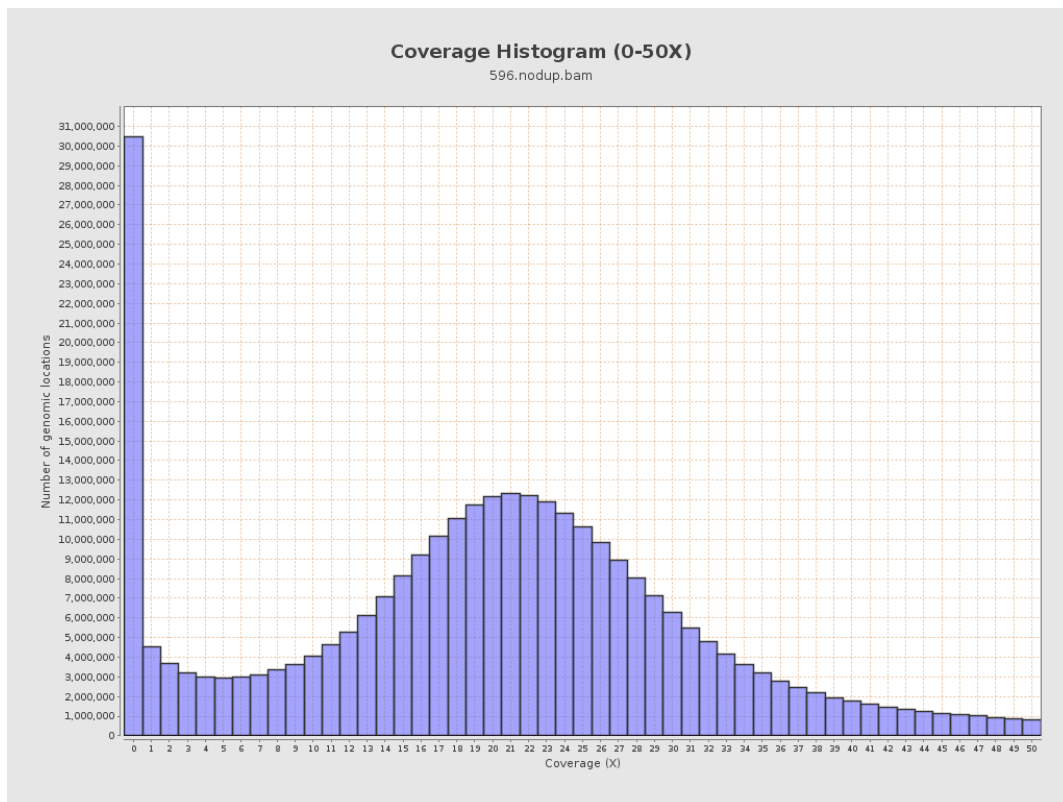
3. Results : Coverage across reference



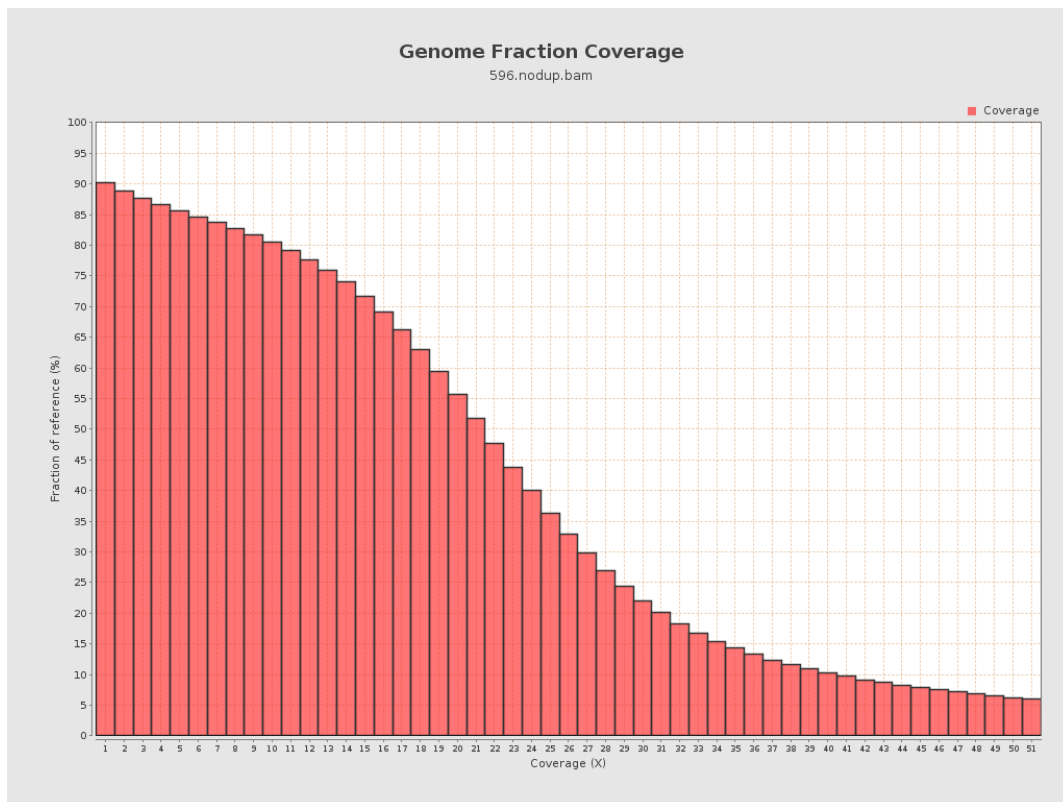
4. Results : Coverage Histogram



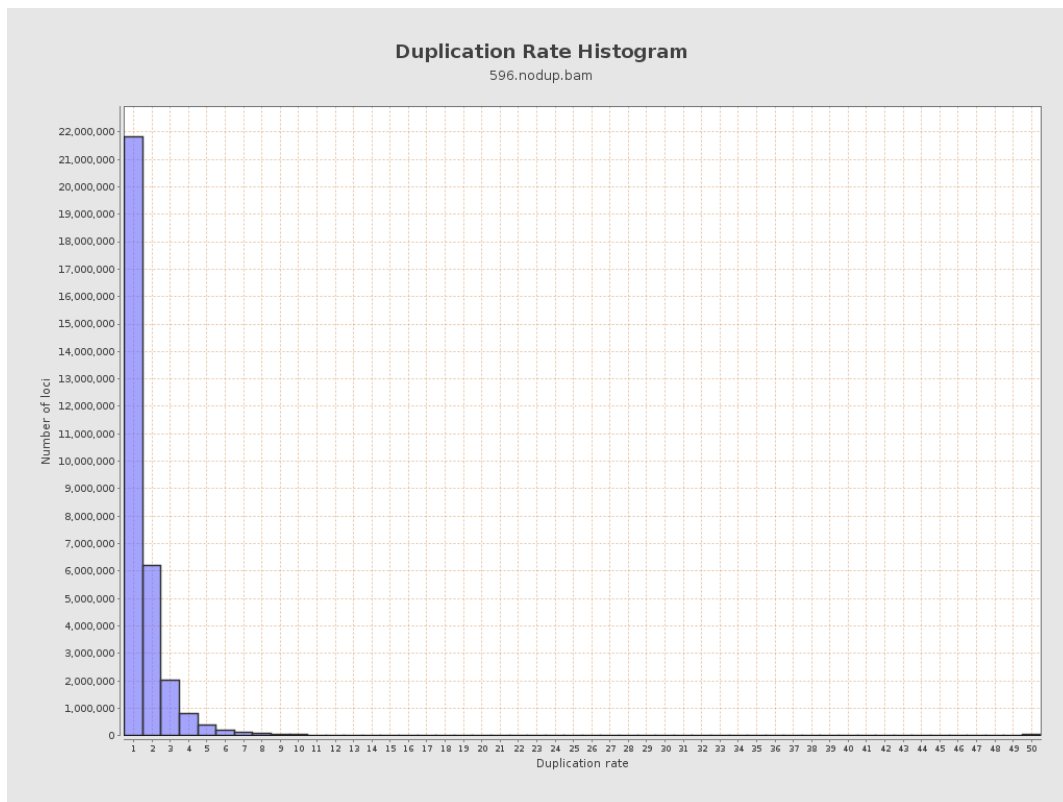
5. Results : Coverage Histogram (0-50X)



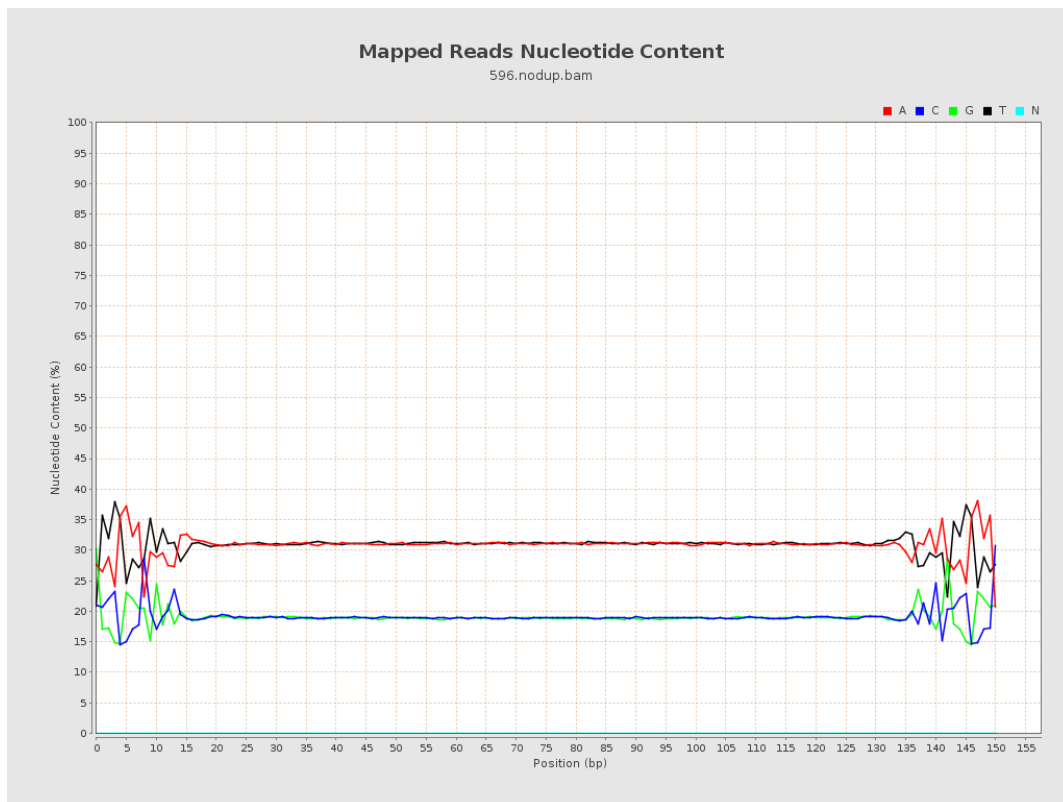
6. Results : Genome Fraction Coverage



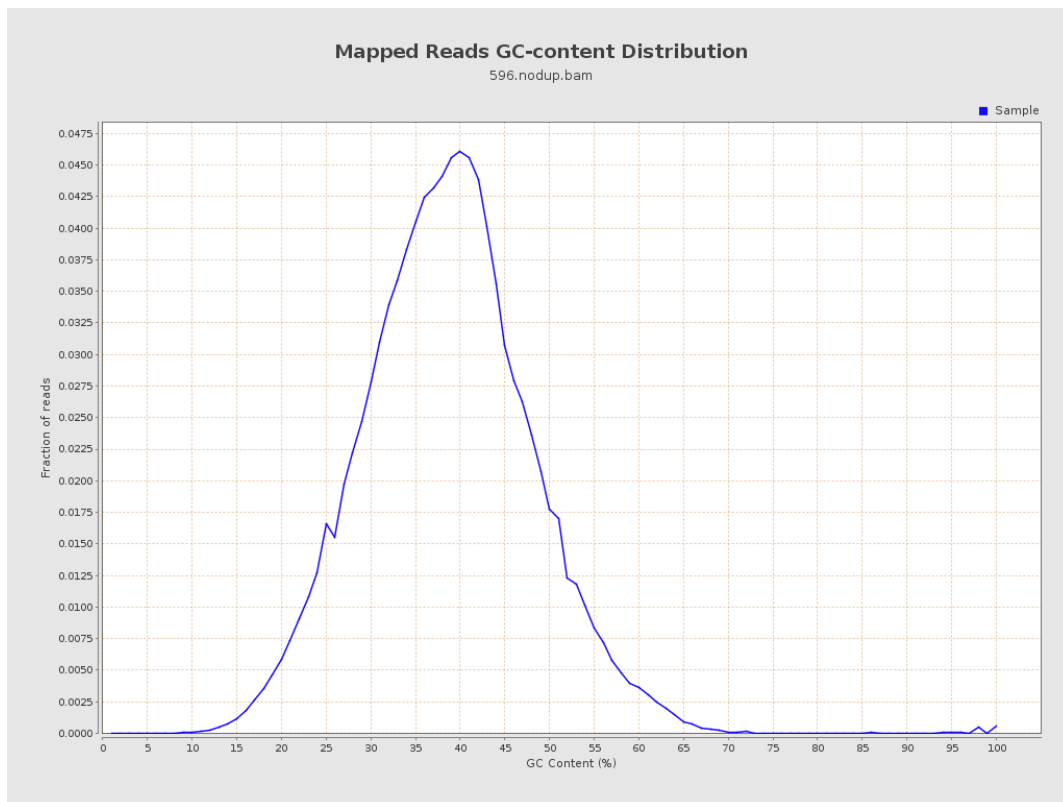
7. Results : Duplication Rate Histogram



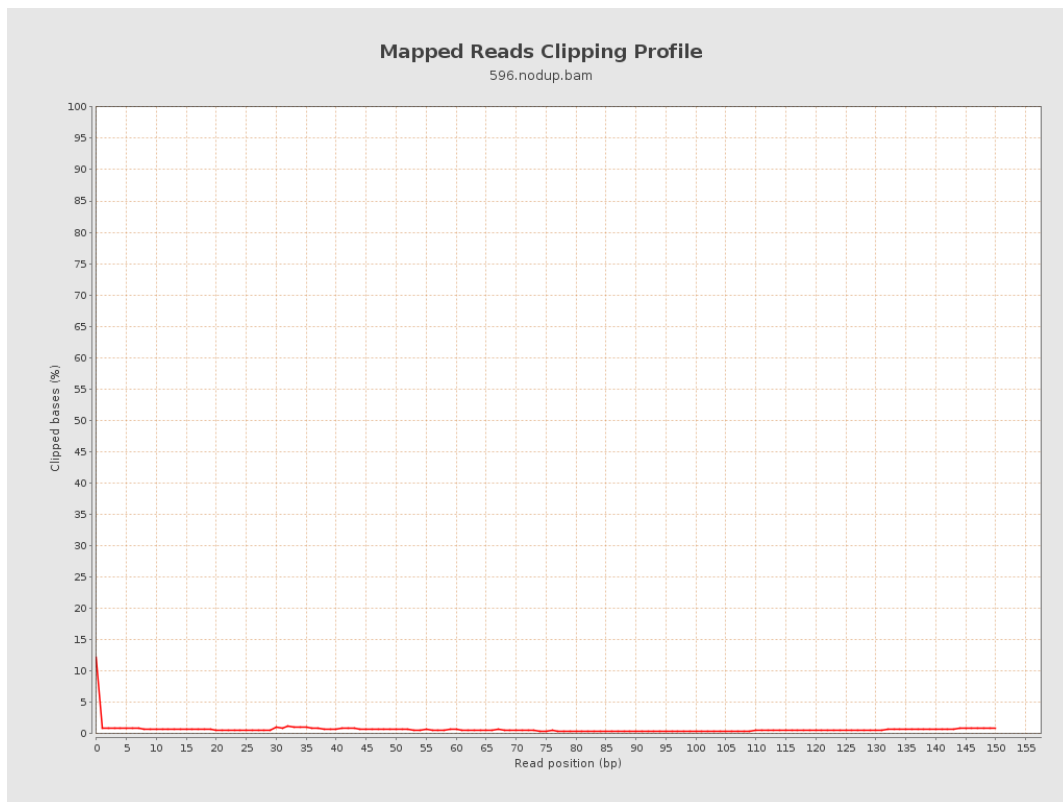
8. Results : Mapped Reads Nucleotide Content



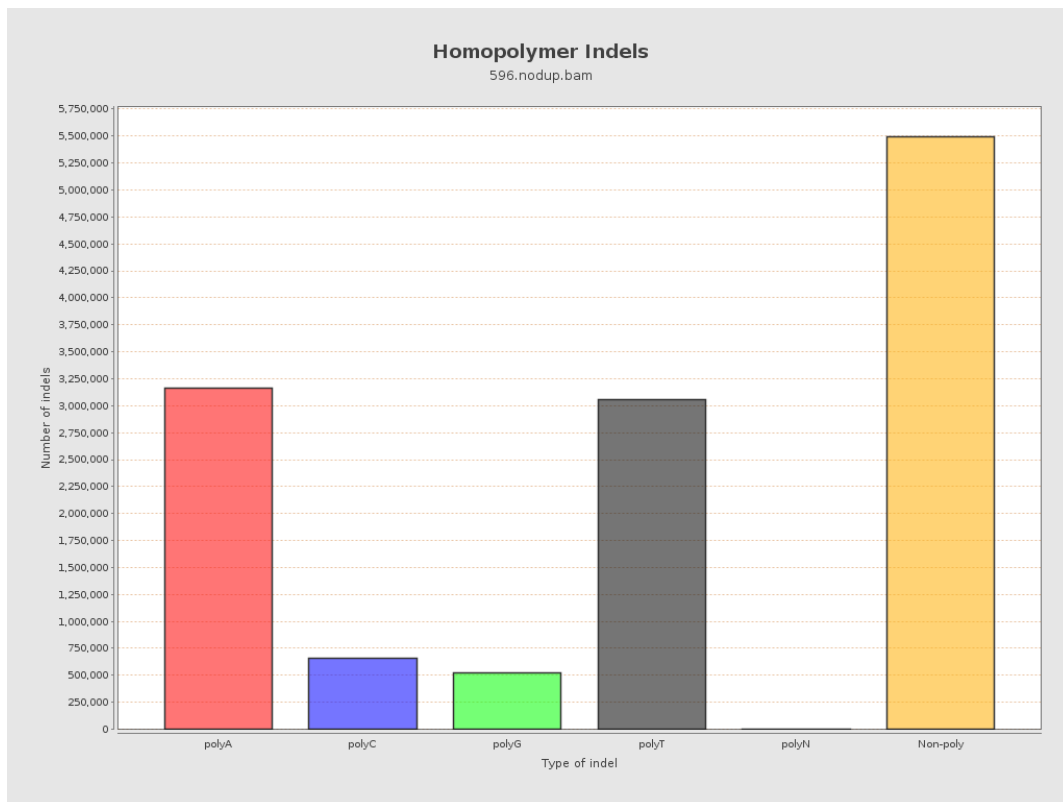
9. Results : Mapped Reads GC-content Distribution



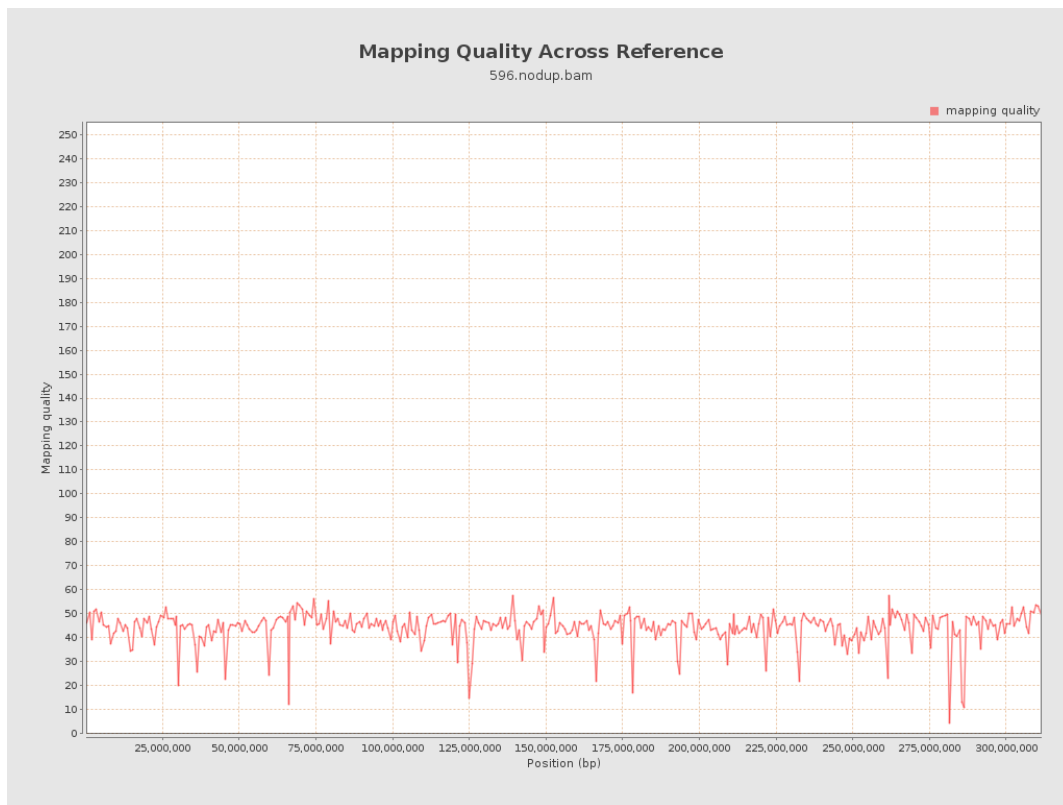
10. Results : Mapped Reads Clipping Profile



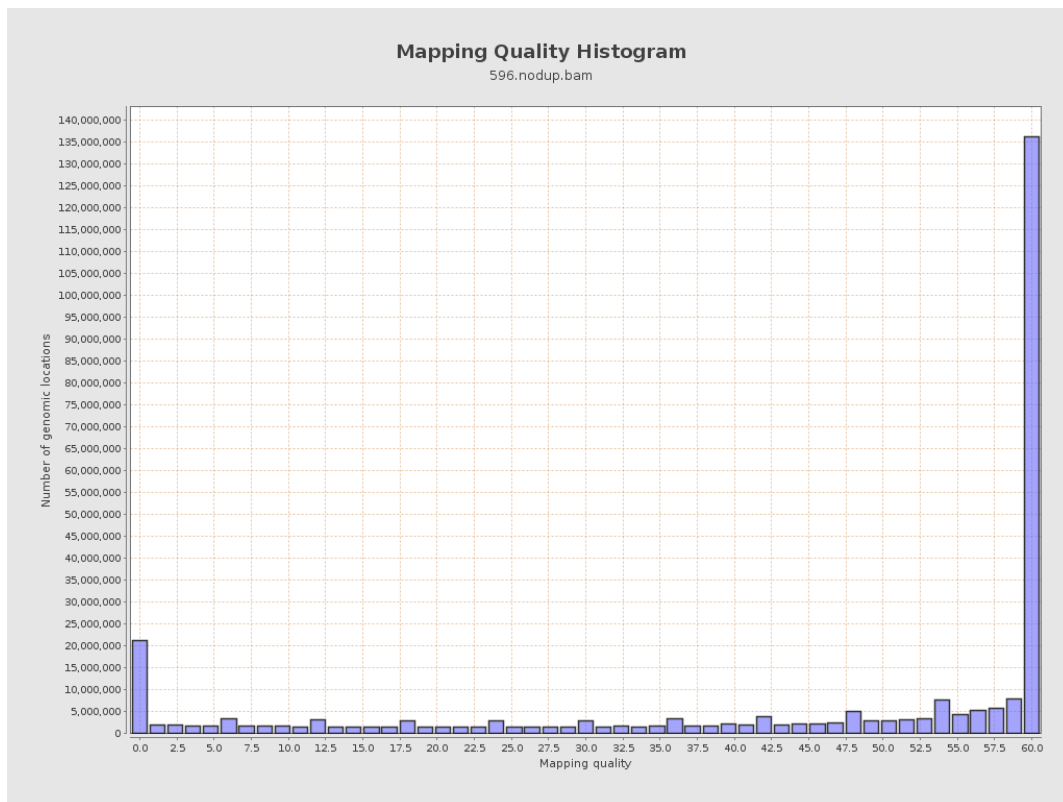
11. Results : Homopolymer Indels



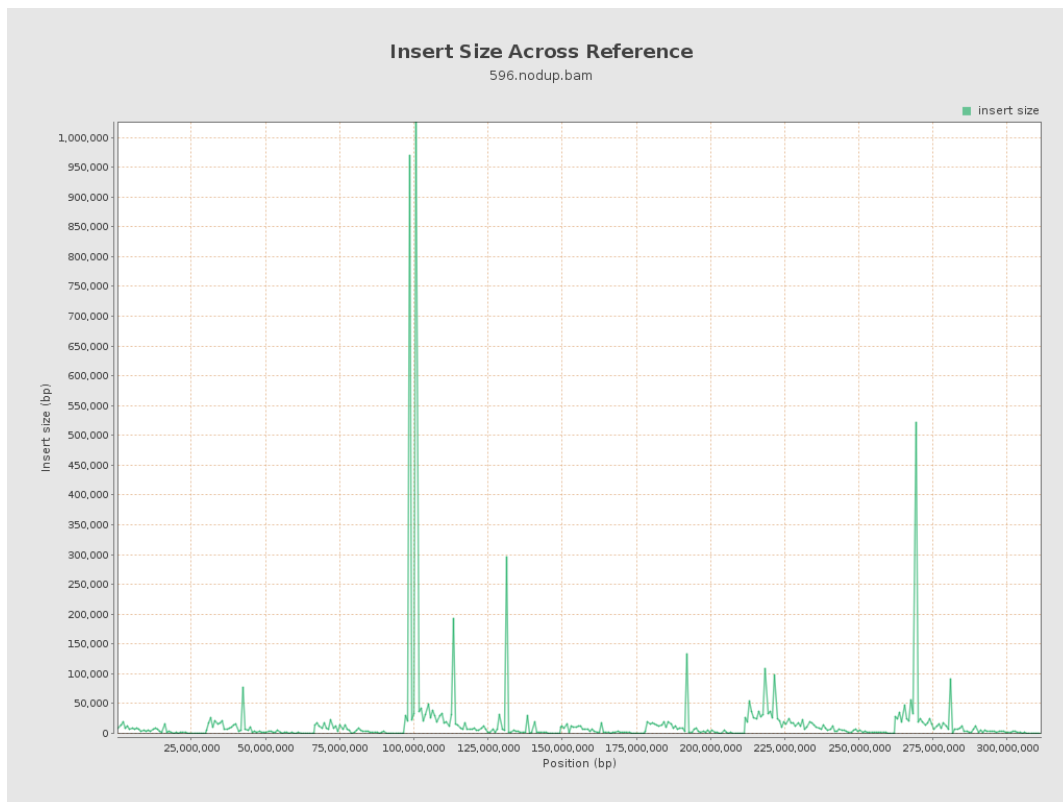
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

