

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2023/05/29 21:36:39

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/666
.nodup.bam -nw 400 -hm 3
```

1.2. Alignment

| | |
|---------------------------------------|---|
| BAM file: | /proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/666 .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_417/02-FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_417_S392_L004_R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/awdata/P26207/P26207_417/02-FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_417_S392_L004_R2_001.fastq.gz |
| Size of a homopolymer: | 3 |
| Number of windows: | 400 |

| | |
|----------------------------|-------------------------------|
| Analysis date: | Mon May 29 21:36:38 CEST 2023 |
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |

2. Summary

2.1. Globals

| | |
|------------------------------|---------------------|
| Reference size | 311,642,060 |
| Number of reads | 79,262,383 |
| Mapped reads | 75,090,769 / 94.74% |
| Unmapped reads | 4,171,614 / 5.26% |
| Mapped paired reads | 75,090,769 / 94.74% |
| Mapped reads, first in pair | 37,630,451 / 47.48% |
| Mapped reads, second in pair | 37,460,318 / 47.26% |
| Mapped reads, both in pair | 73,578,899 / 92.83% |
| Mapped reads, singletons | 1,511,870 / 1.91% |
| Read min/max/mean length | 30 / 151 / 148.16 |
| Duplicated reads (flagged) | 12,351,806 / 15.58% |
| Clipped reads | 16,149,863 / 20.38% |

2.2. ACGT Content

| | |
|--------------------------|------------------------|
| Number/percentage of A's | 3,226,590,493 / 30.84% |
| Number/percentage of C's | 2,006,531,862 / 19.18% |
| Number/percentage of T's | 3,230,425,326 / 30.88% |
| Number/percentage of G's | 1,997,473,849 / 19.09% |
| Number/percentage of N's | 37,152 / 0% |
| GC Percentage | 38.28% |

2.3. Coverage

| | |
|--------------------|----------|
| Mean | 33.6518 |
| Standard Deviation | 274.7849 |

2.4. Mapping Quality

| | |
|----------------------|-------|
| Mean Mapping Quality | 44.11 |
|----------------------|-------|

2.5. Insert size

| | |
|--------------------|-----------------|
| Mean | 235,229.81 |
| Standard Deviation | 2,296,677.94 |
| P25/Median/P75 | 352 / 461 / 608 |

2.6. Mismatches and indels

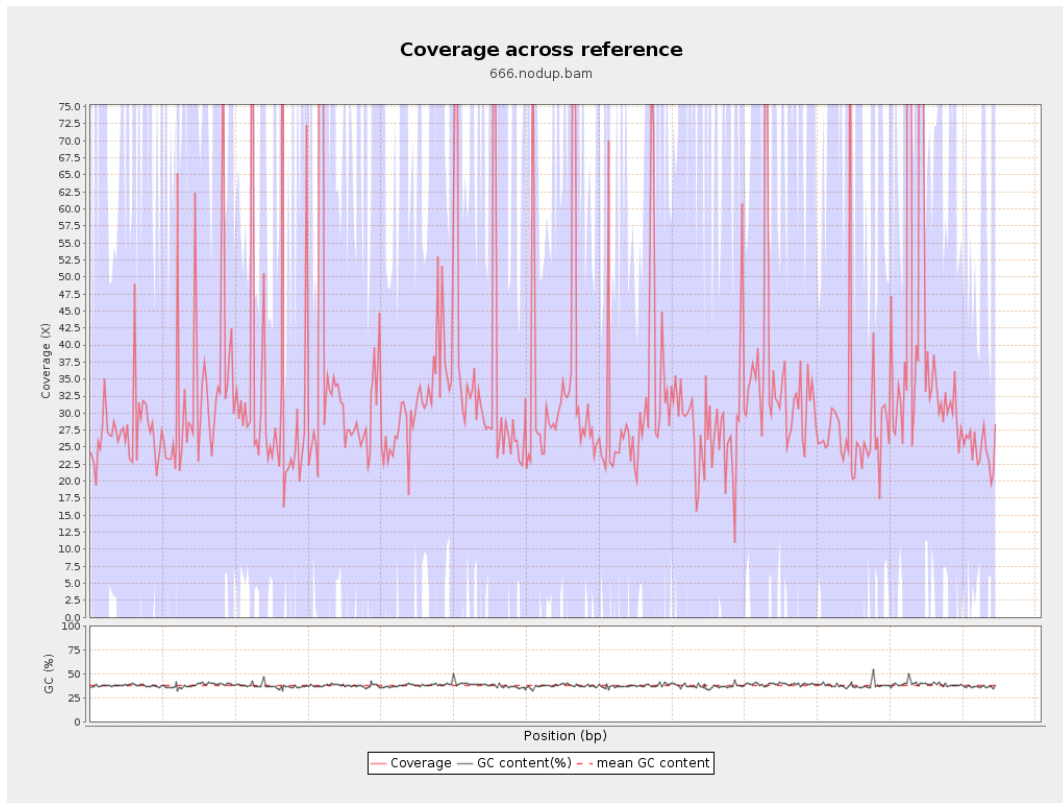
| | |
|--|-------------|
| General error rate | 2.29% |
| Mismatches | 220,660,668 |
| Insertions | 6,979,675 |
| Mapped reads with at least one insertion | 8.37% |
| Deletions | 7,071,734 |
| Mapped reads with at least one deletion | 8.35% |
| Homopolymer indels | 56.39% |

2.7. Chromosome stats

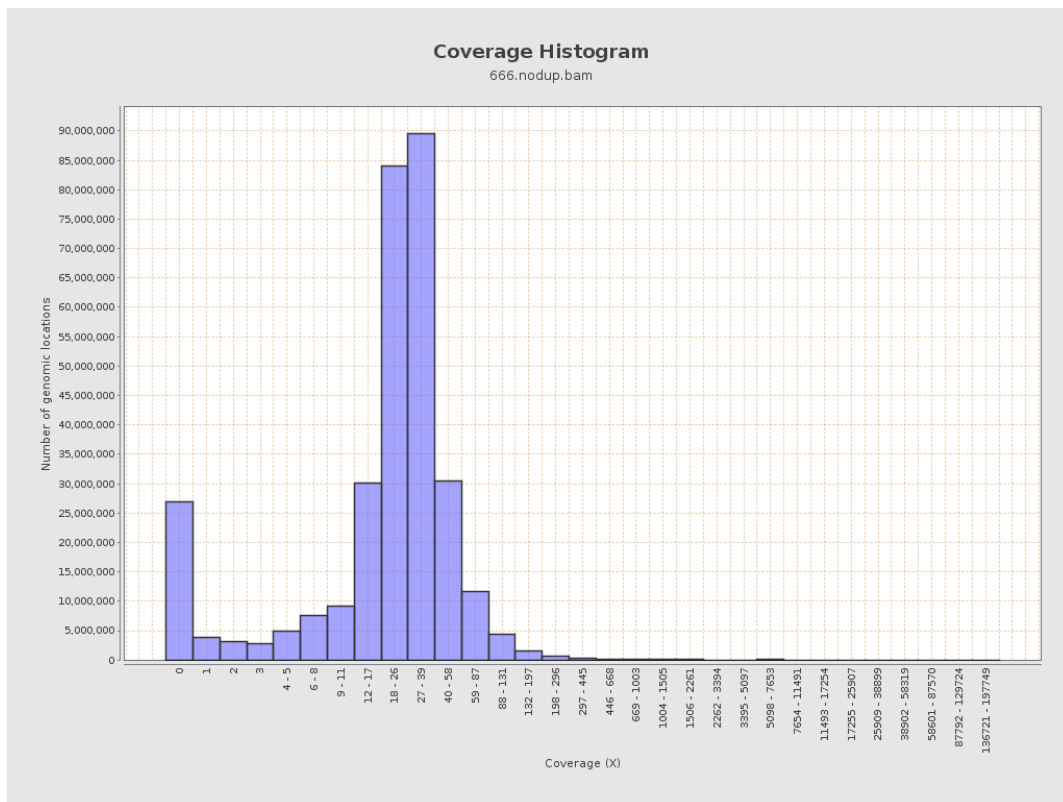
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|---------------|--------------------|
| LT669788.1 | 29724344 | 796602281 | 26.7997 | 78.5182 |

| | | | | |
|------------|----------|------------|---------|----------|
| LT669789.1 | 36598175 | 1272118370 | 34.7591 | 302.9184 |
| LT669790.1 | 30422129 | 1071793079 | 35.2307 | 266.2403 |
| LT669791.1 | 52758100 | 1766522191 | 33.4834 | 241.7355 |
| LT669792.1 | 28376109 | 931370460 | 32.8223 | 349.5742 |
| LT669793.1 | 33388210 | 1022998042 | 30.6395 | 140.5181 |
| LT669794.1 | 50579949 | 1640161863 | 32.4271 | 243.2134 |
| LT669795.1 | 49795044 | 1985742656 | 39.8783 | 391.3797 |

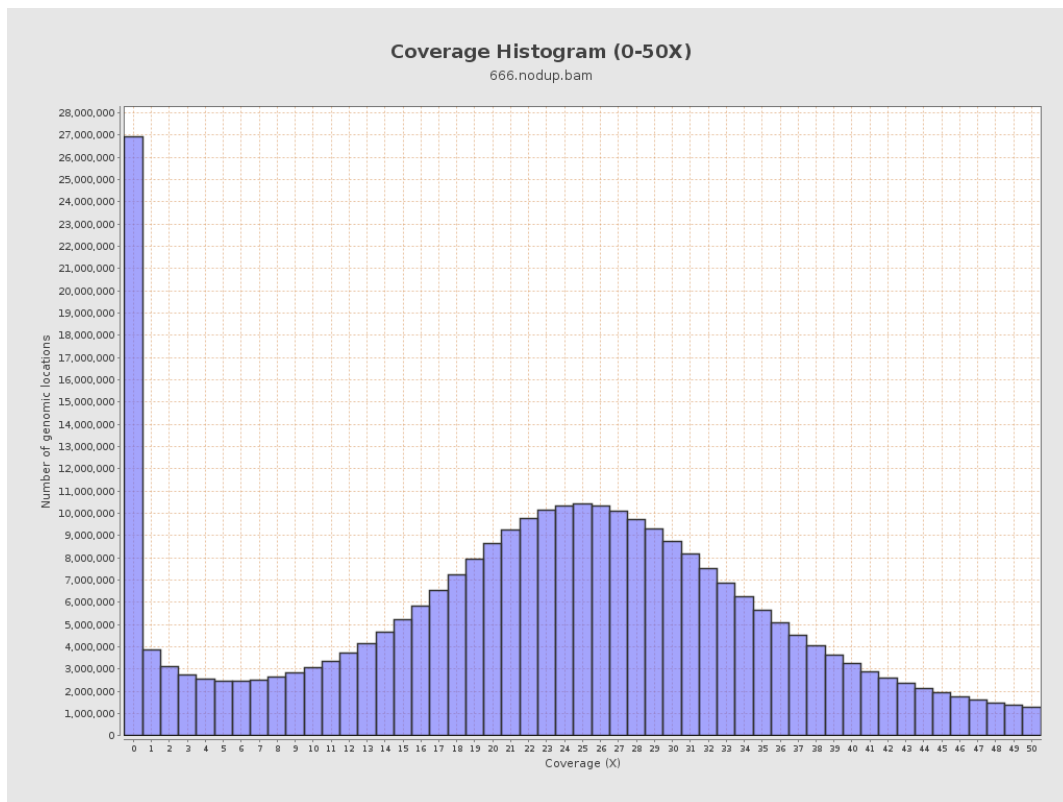
3. Results : Coverage across reference



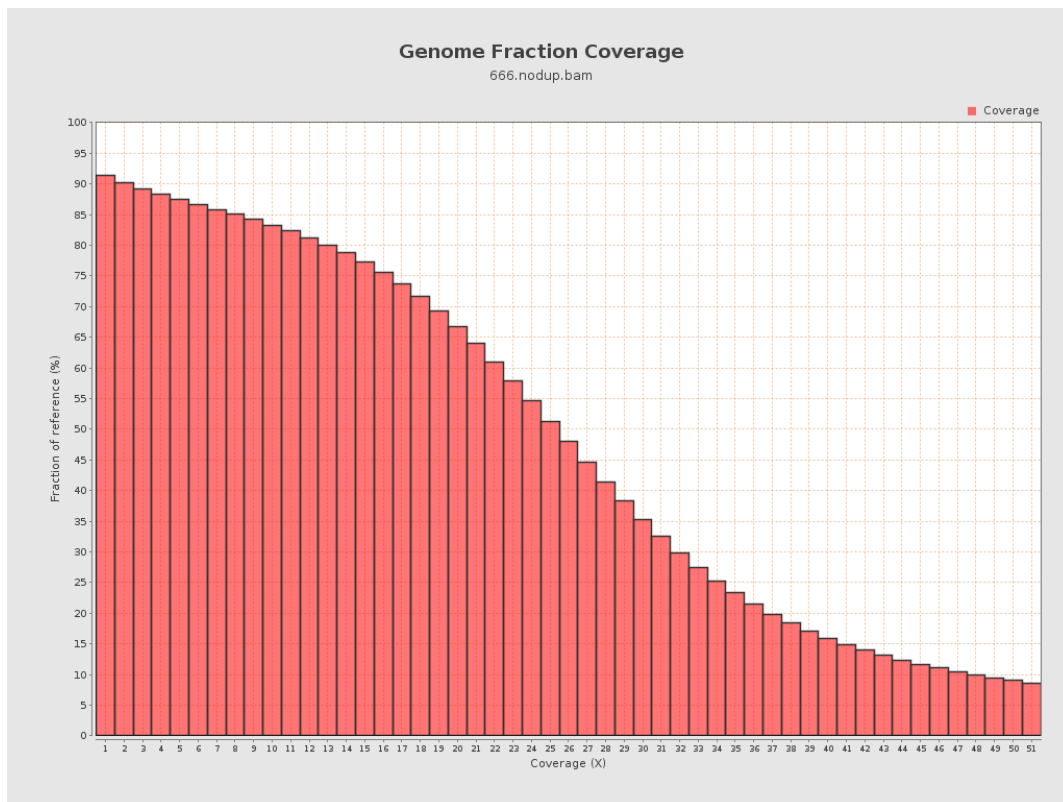
4. Results : Coverage Histogram



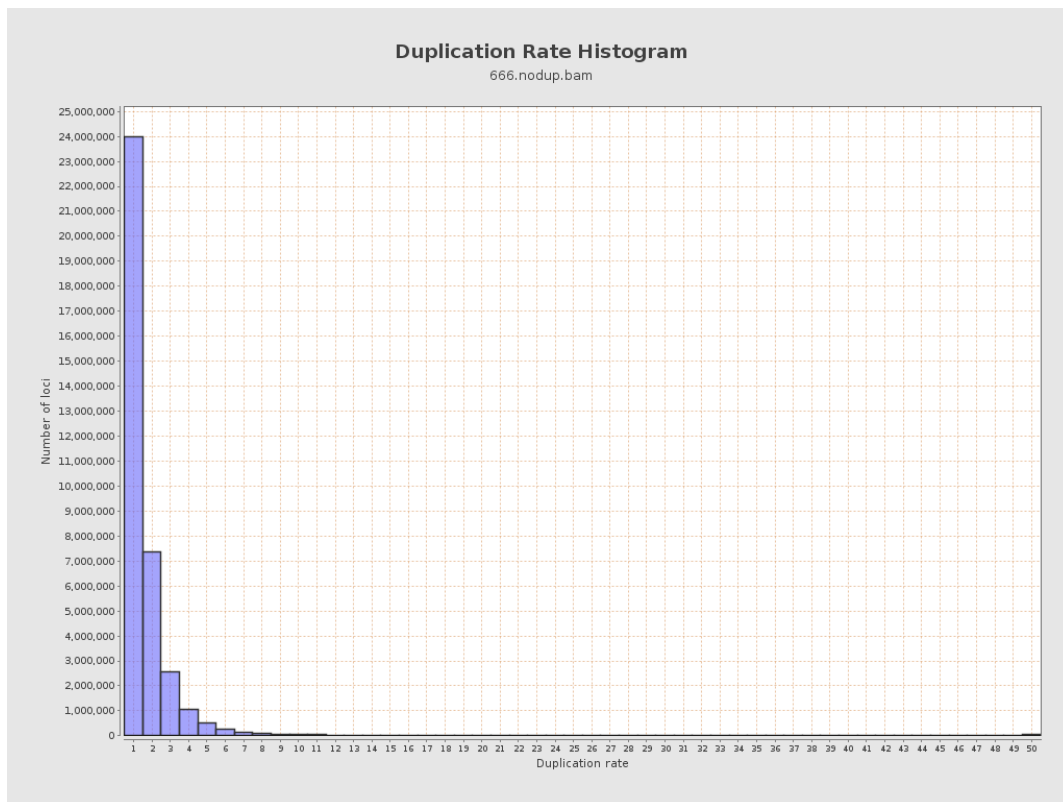
5. Results : Coverage Histogram (0-50X)



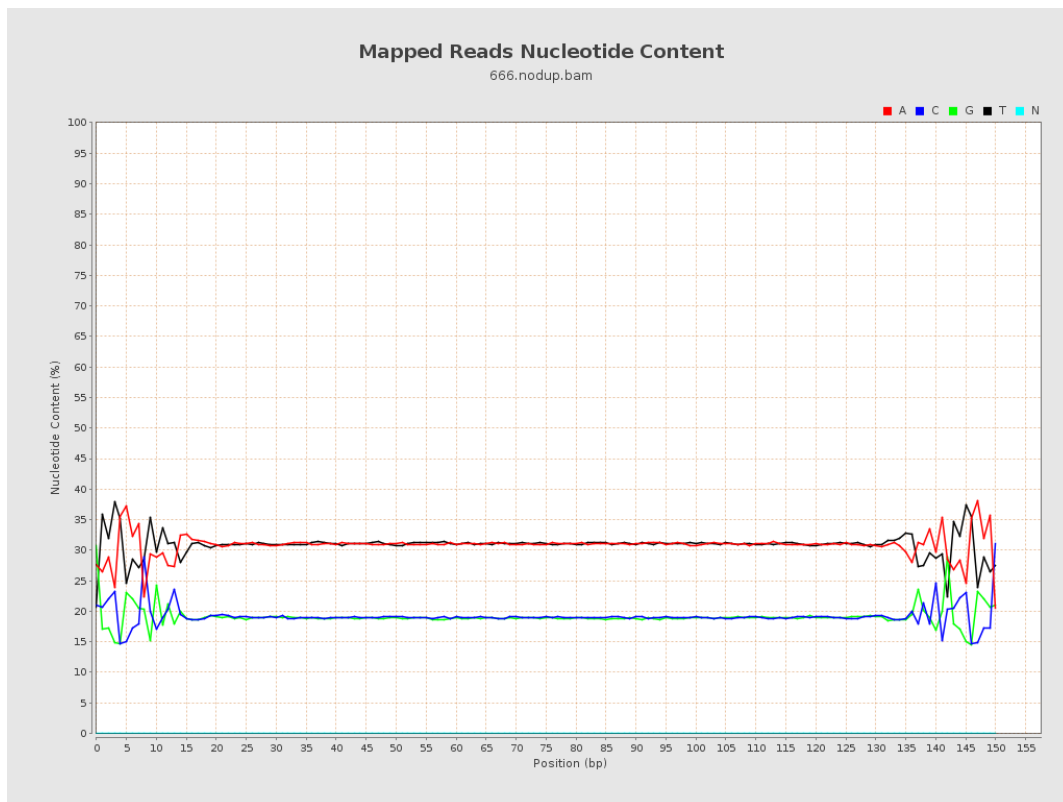
6. Results : Genome Fraction Coverage



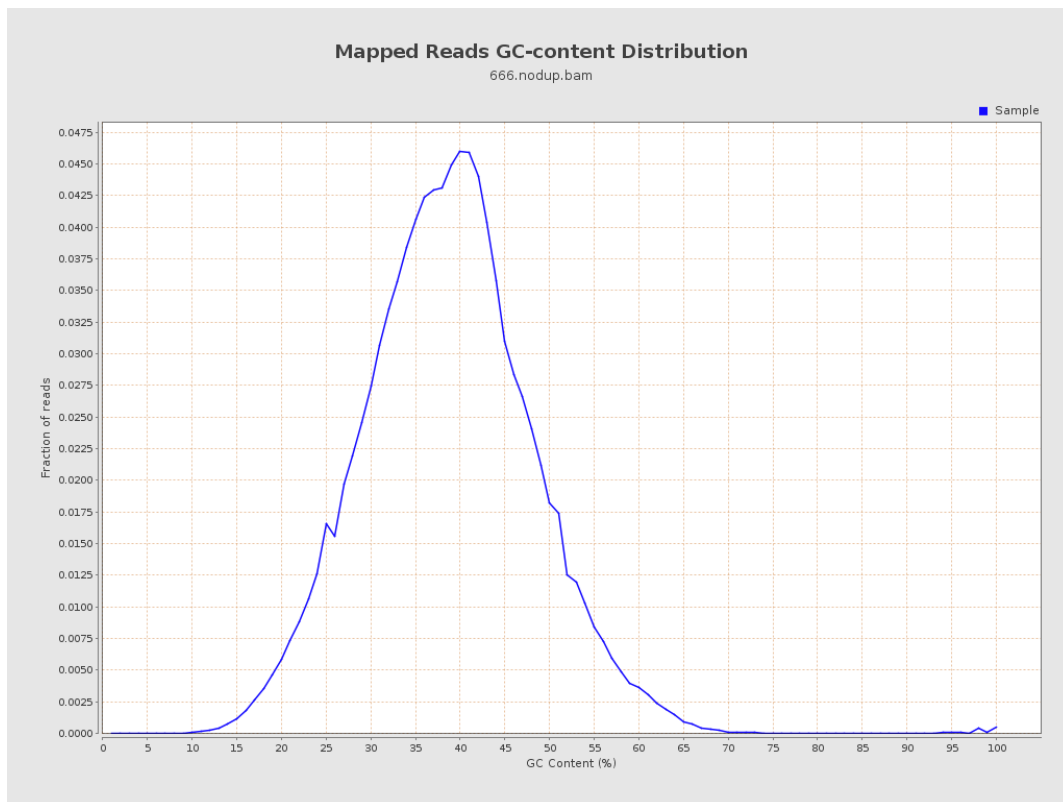
7. Results : Duplication Rate Histogram



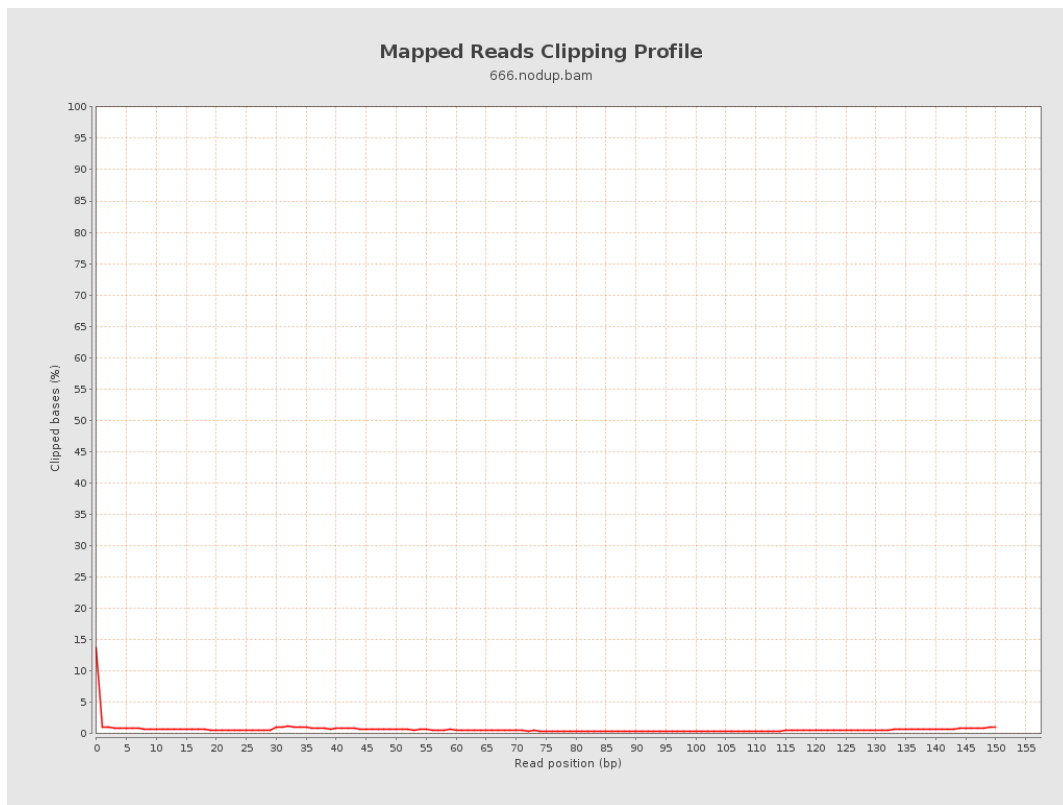
8. Results : Mapped Reads Nucleotide Content



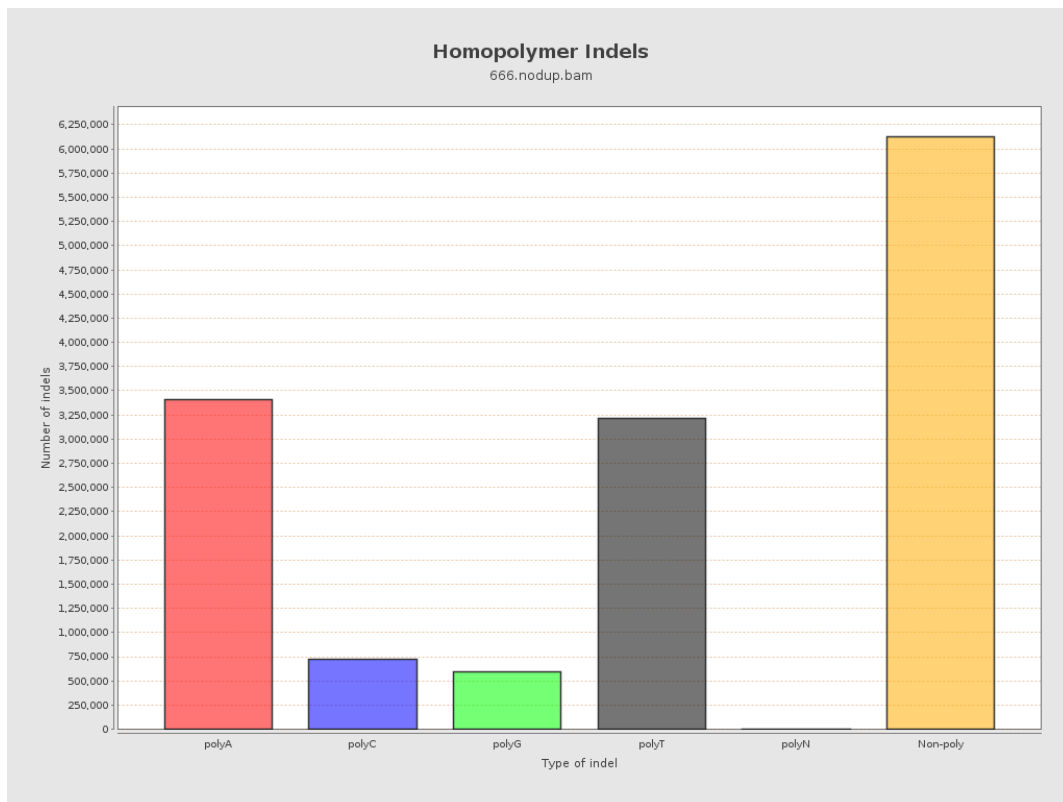
9. Results : Mapped Reads GC-content Distribution



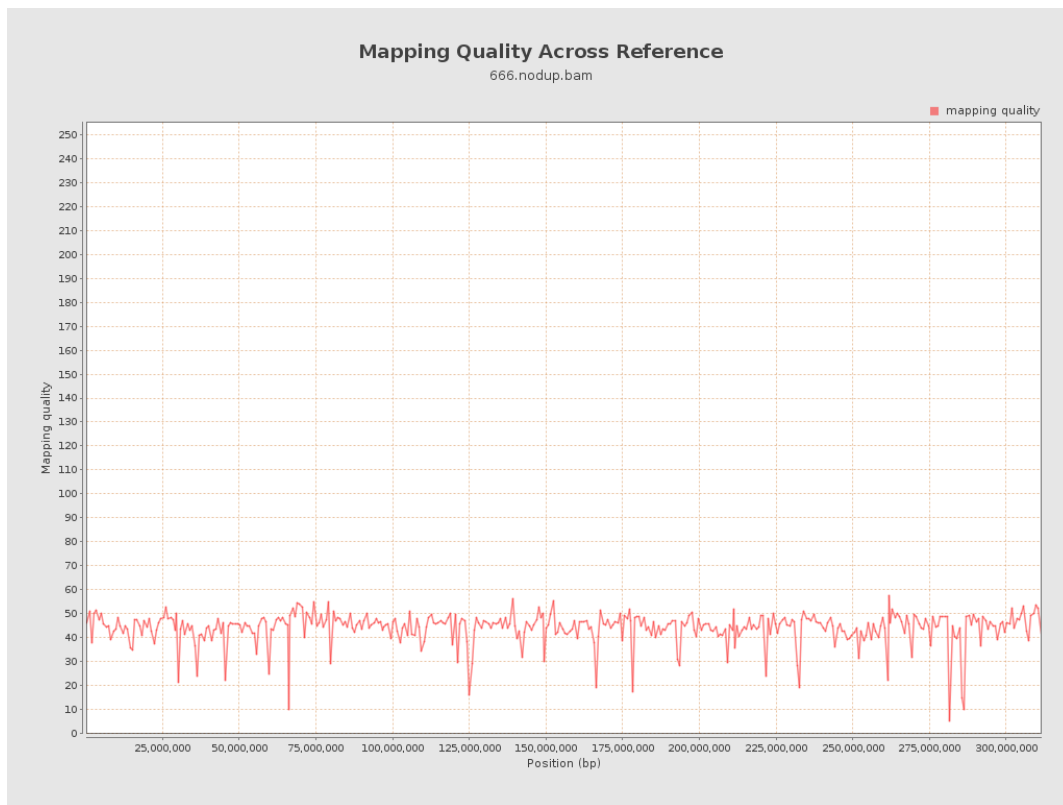
10. Results : Mapped Reads Clipping Profile



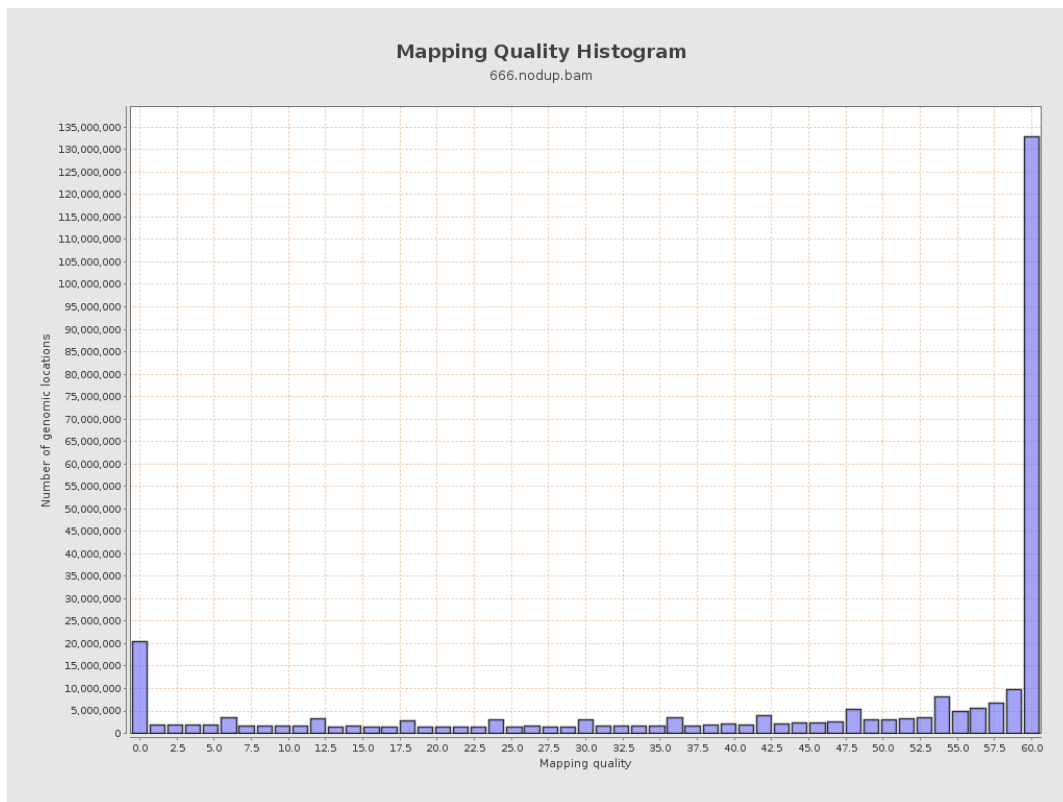
11. Results : Homopolymer Indels



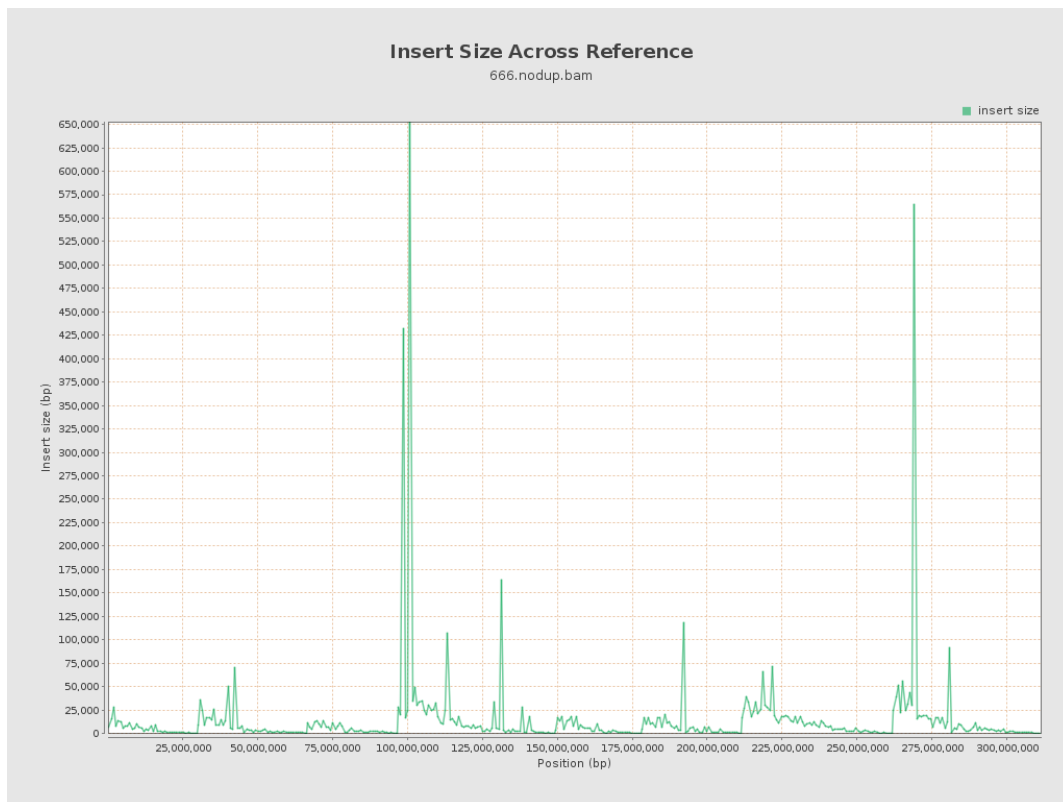
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

