

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2023/05/29 21:37:15

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/142
5
.nodup.bam -nw 400 -hm 3
```

1.2. Alignment

| | |
|---------------------------------------|---|
| BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 1425 .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_415/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_415_S390_L004 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_415/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_415_S390_L004 _R2_001.fastq.gz |
| Size of a homopolymer: | 3 |
| | |

| | |
|----------------------------|-------------------------------|
| Number of windows: | 400 |
| Analysis date: | Mon May 29 21:37:15 CEST 2023 |
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |

2. Summary

2.1. Globals

| | |
|------------------------------|---------------------|
| Reference size | 311,642,060 |
| Number of reads | 80,558,407 |
| Mapped reads | 76,660,816 / 95.16% |
| Unmapped reads | 3,897,591 / 4.84% |
| Mapped paired reads | 76,660,816 / 95.16% |
| Mapped reads, first in pair | 38,378,614 / 47.64% |
| Mapped reads, second in pair | 38,282,202 / 47.52% |
| Mapped reads, both in pair | 75,367,880 / 93.56% |
| Mapped reads, singletons | 1,292,936 / 1.6% |
| Read min/max/mean length | 30 / 151 / 148.05 |
| Duplicated reads (flagged) | 11,688,571 / 14.51% |
| Clipped reads | 16,452,784 / 20.42% |

2.2. ACGT Content

| | |
|--------------------------|------------------------|
| Number/percentage of A's | 3,279,940,592 / 30.7% |
| Number/percentage of C's | 2,062,762,383 / 19.31% |
| Number/percentage of T's | 3,286,786,484 / 30.77% |
| Number/percentage of G's | 2,053,289,389 / 19.22% |
| Number/percentage of N's | 35,315 / 0% |
| GC Percentage | 38.53% |

2.3. Coverage

| | |
|--------------------|----------|
| Mean | 34.3695 |
| Standard Deviation | 261.2207 |

2.4. Mapping Quality

| | |
|----------------------|-------|
| Mean Mapping Quality | 43.85 |
|----------------------|-------|

2.5. Insert size

| | |
|--------------------|-----------------|
| Mean | 226,818.89 |
| Standard Deviation | 2,248,929.51 |
| P25/Median/P75 | 334 / 437 / 572 |

2.6. Mismatches and indels

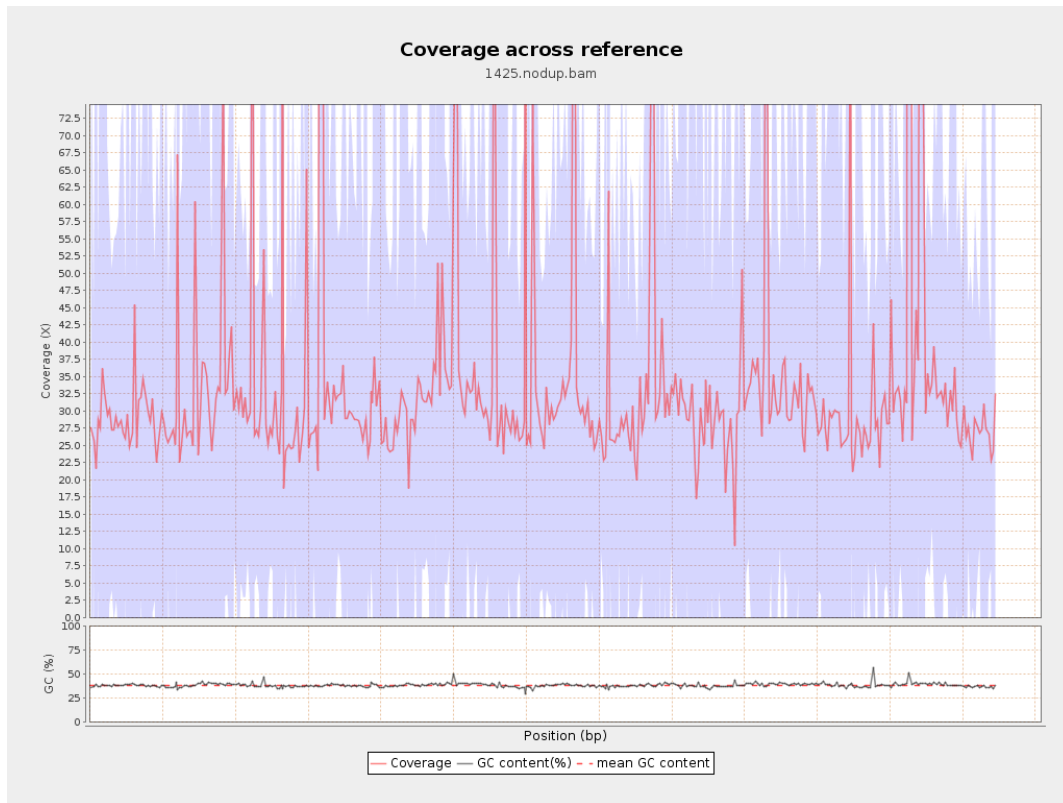
| | |
|--|-------------|
| General error rate | 2.25% |
| Mismatches | 220,768,745 |
| Insertions | 7,030,507 |
| Mapped reads with at least one insertion | 8.26% |
| Deletions | 7,345,318 |
| Mapped reads with at least one deletion | 8.5% |
| Homopolymer indels | 56.08% |

2.7. Chromosome stats

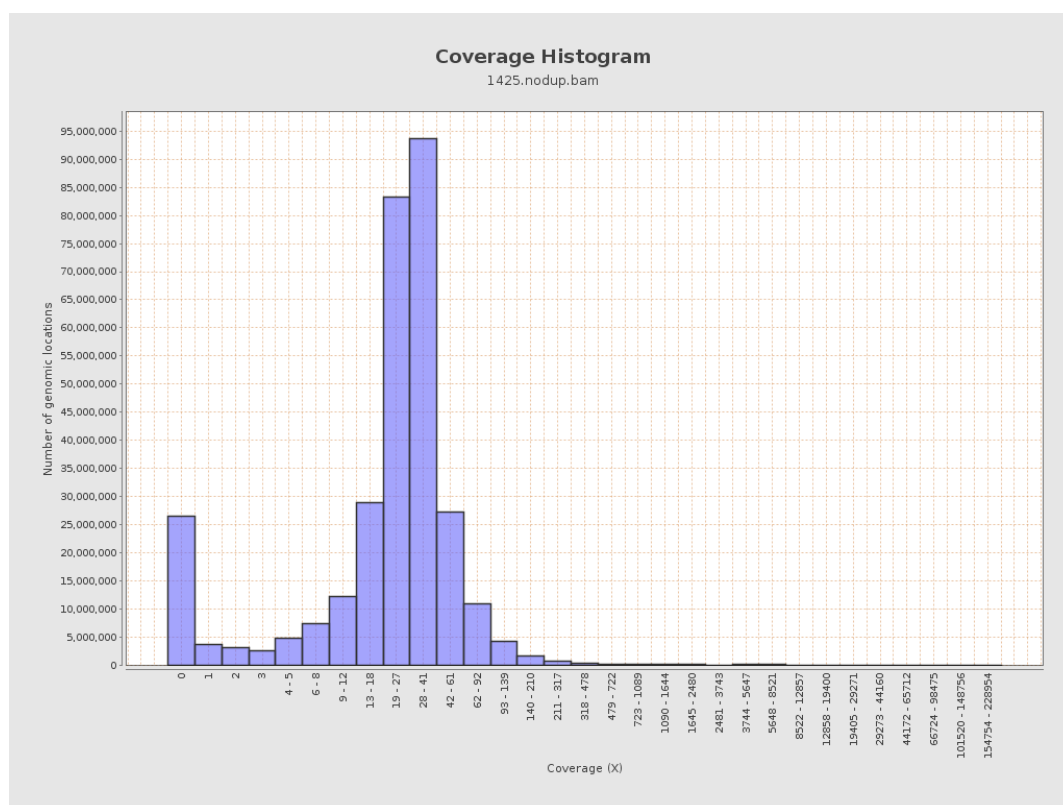
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|---------------|--------------------|
| LT669788.1 | 29724344 | 851852611 | 28.6584 | 95.9977 |

| | | | | |
|------------|----------|------------|---------|----------|
| LT669789.1 | 36598175 | 1270340368 | 34.7105 | 282.3126 |
| LT669790.1 | 30422129 | 1063702376 | 34.9648 | 222.4096 |
| LT669791.1 | 52758100 | 1771143089 | 33.571 | 206.8422 |
| LT669792.1 | 28376109 | 951345292 | 33.5263 | 271.9513 |
| LT669793.1 | 33388210 | 1080664314 | 32.3666 | 189.778 |
| LT669794.1 | 50579949 | 1652514062 | 32.6713 | 226.3238 |
| LT669795.1 | 49795044 | 2069420911 | 41.5588 | 411.126 |

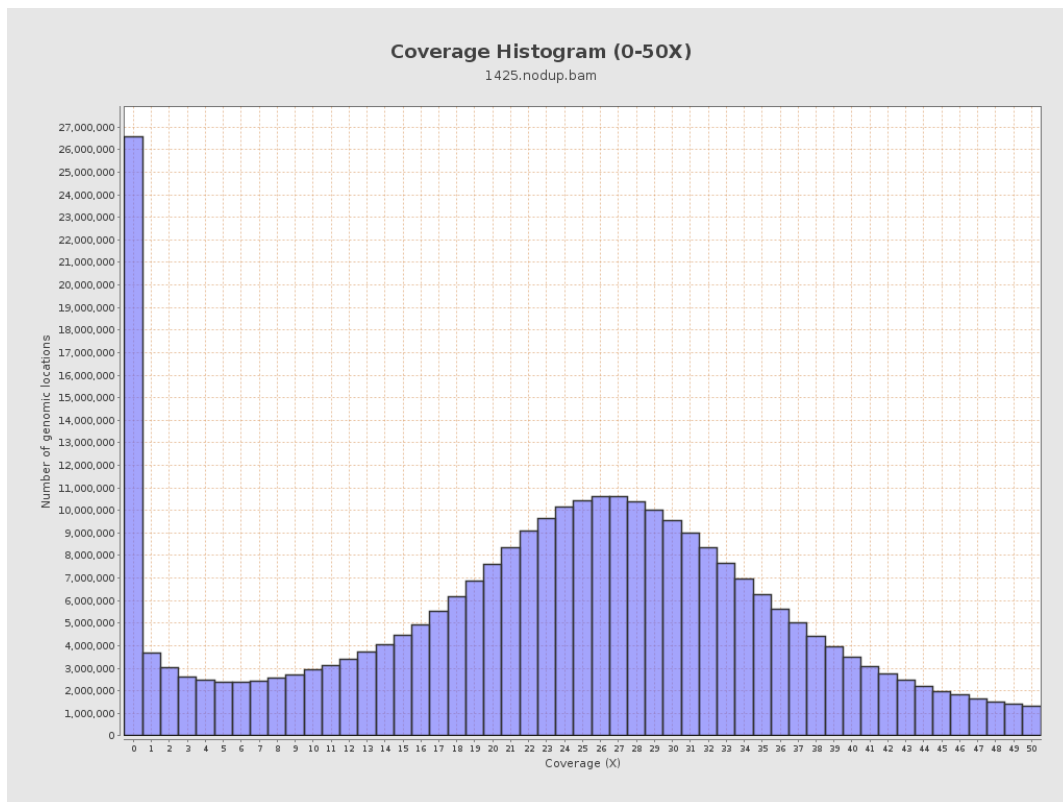
3. Results : Coverage across reference



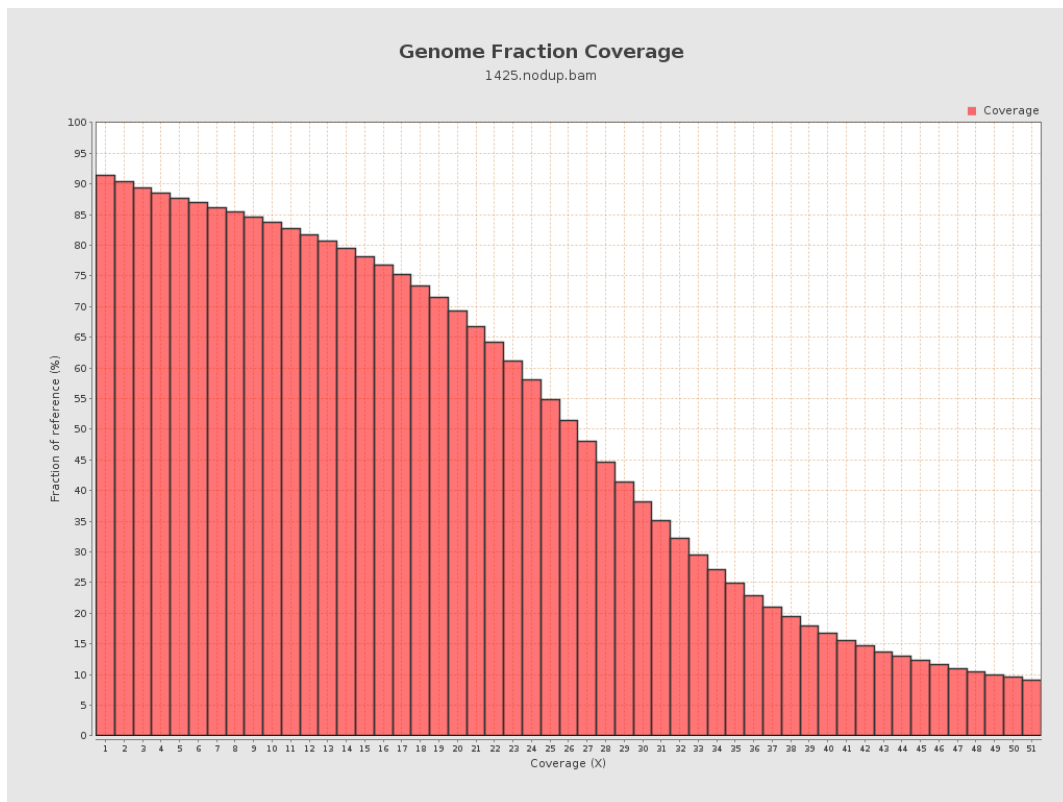
4. Results : Coverage Histogram



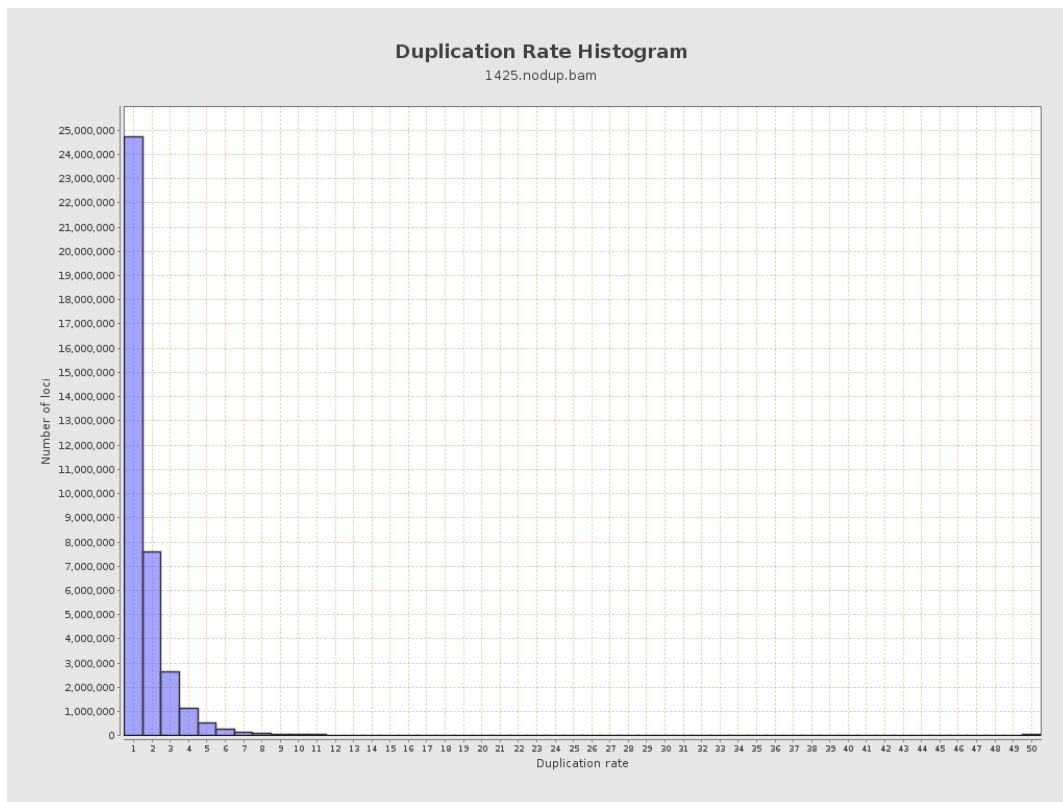
5. Results : Coverage Histogram (0-50X)



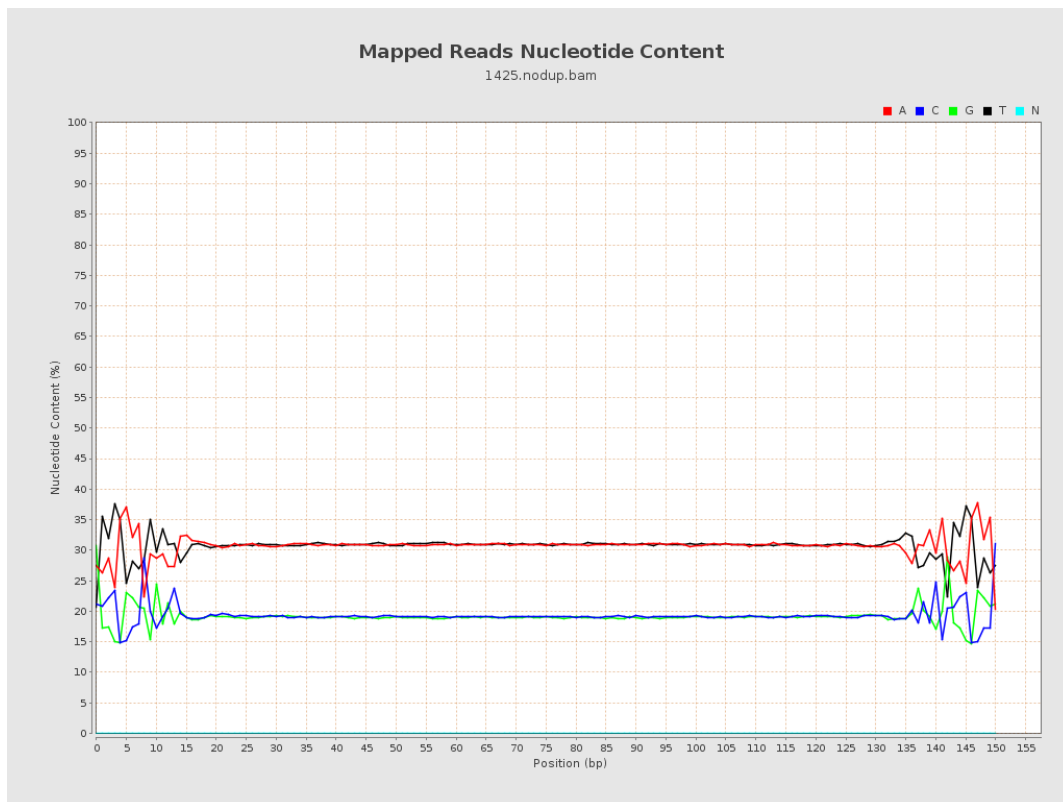
6. Results : Genome Fraction Coverage



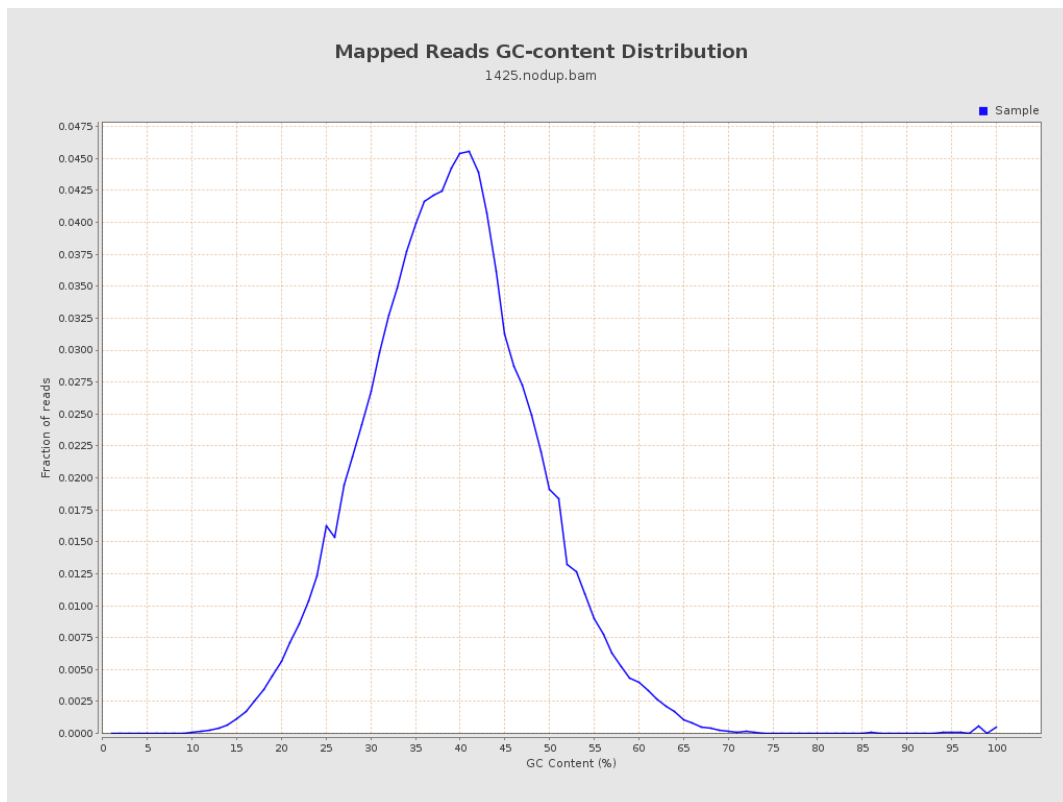
7. Results : Duplication Rate Histogram



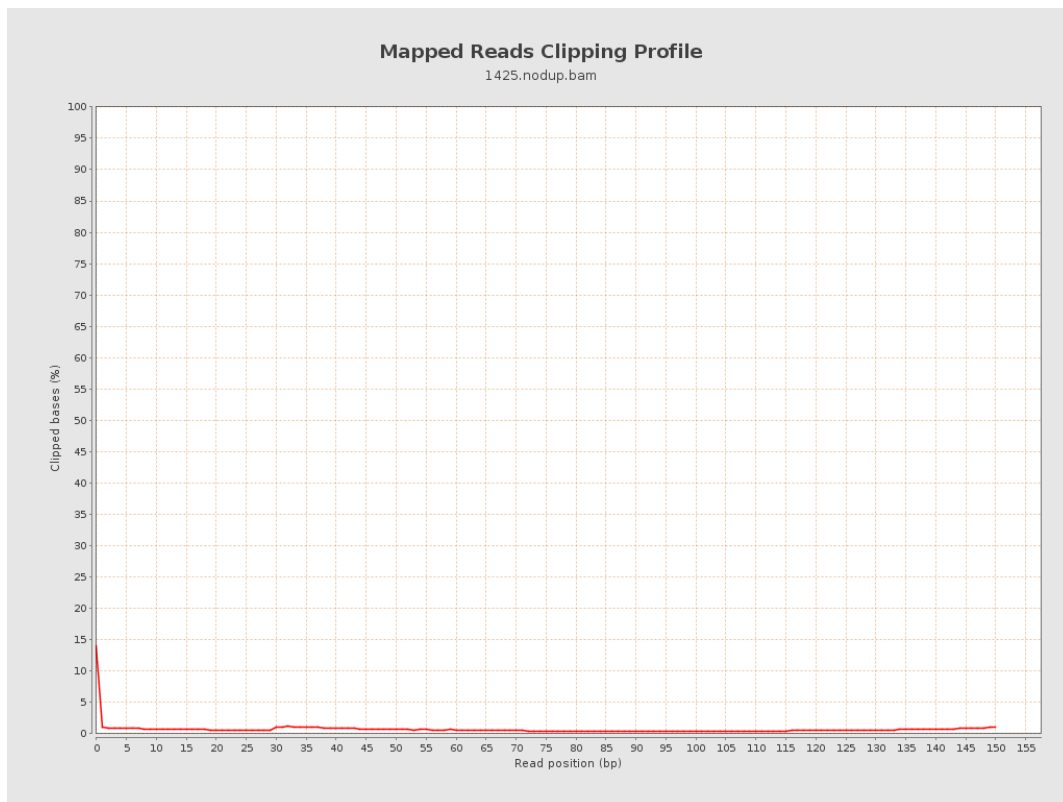
8. Results : Mapped Reads Nucleotide Content



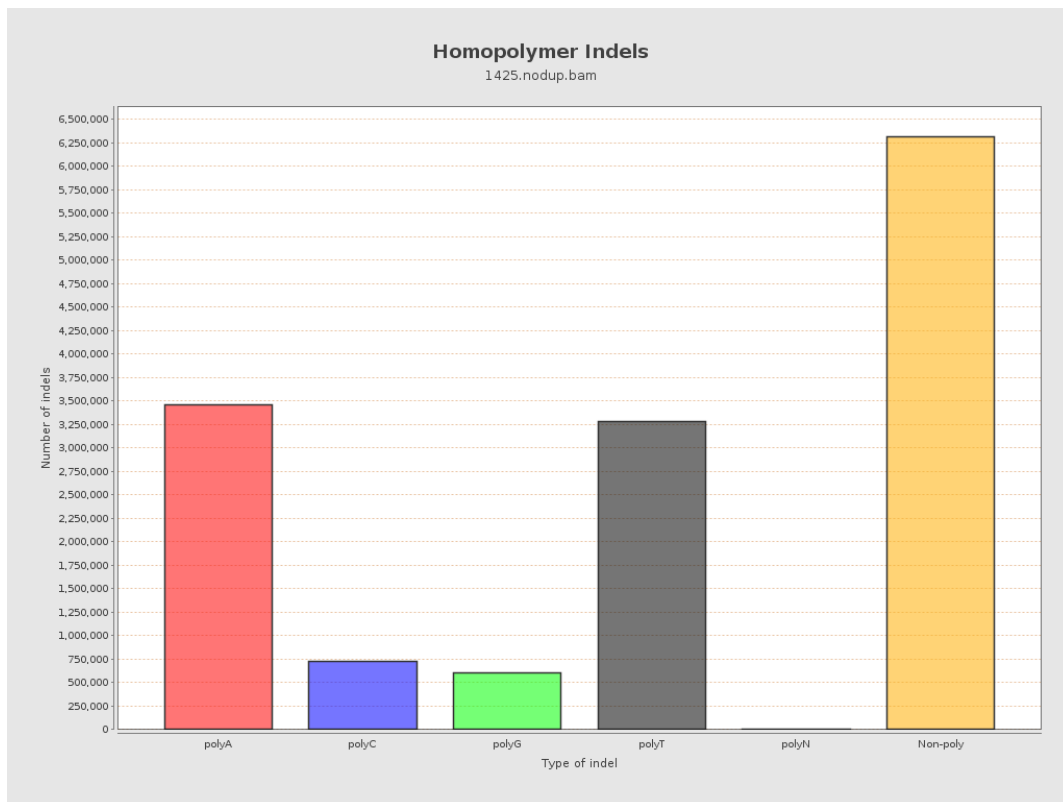
9. Results : Mapped Reads GC-content Distribution



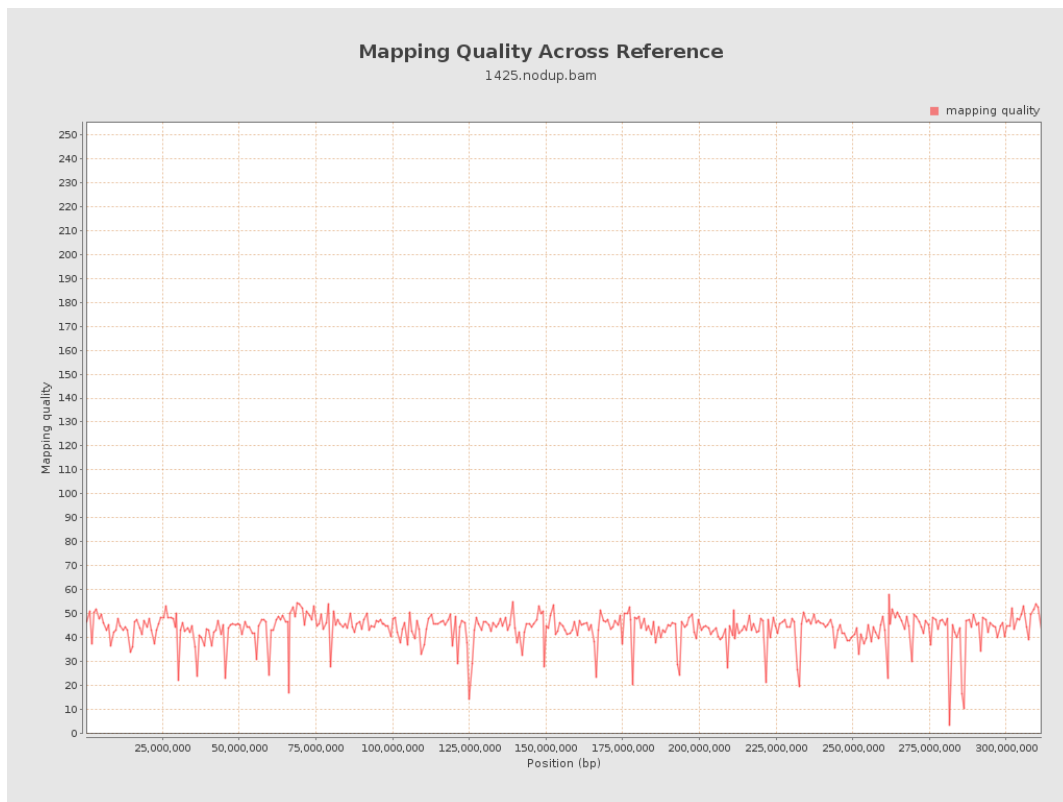
10. Results : Mapped Reads Clipping Profile



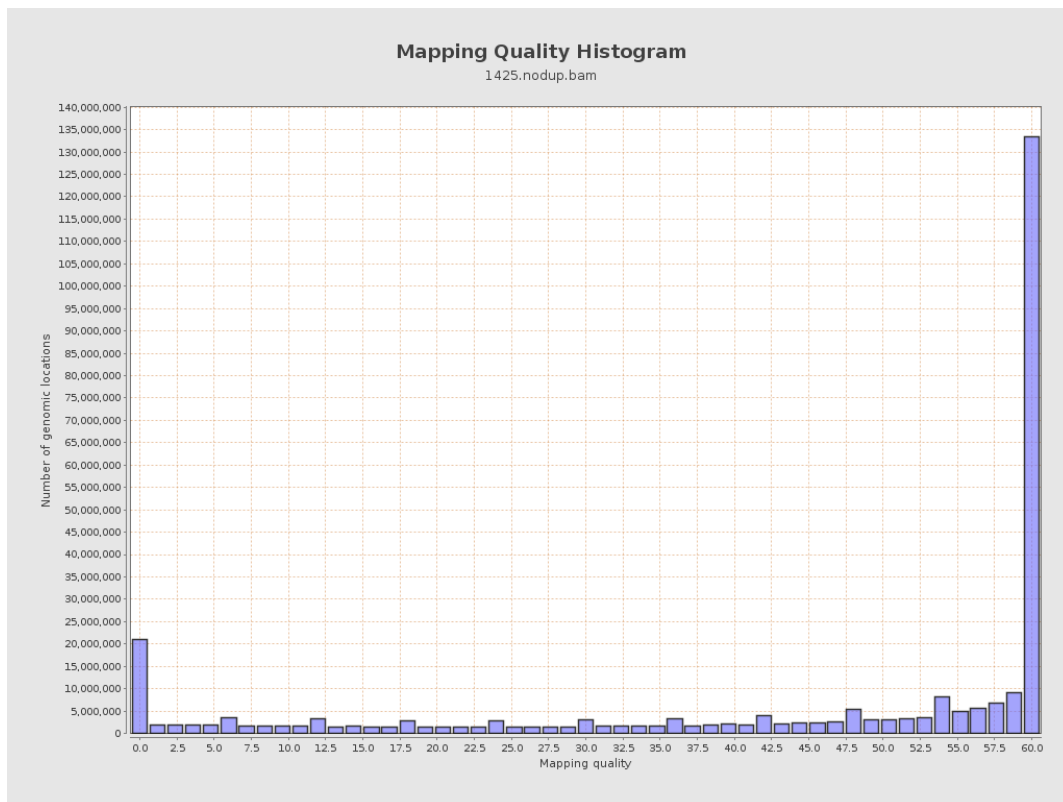
11. Results : Homopolymer Indels



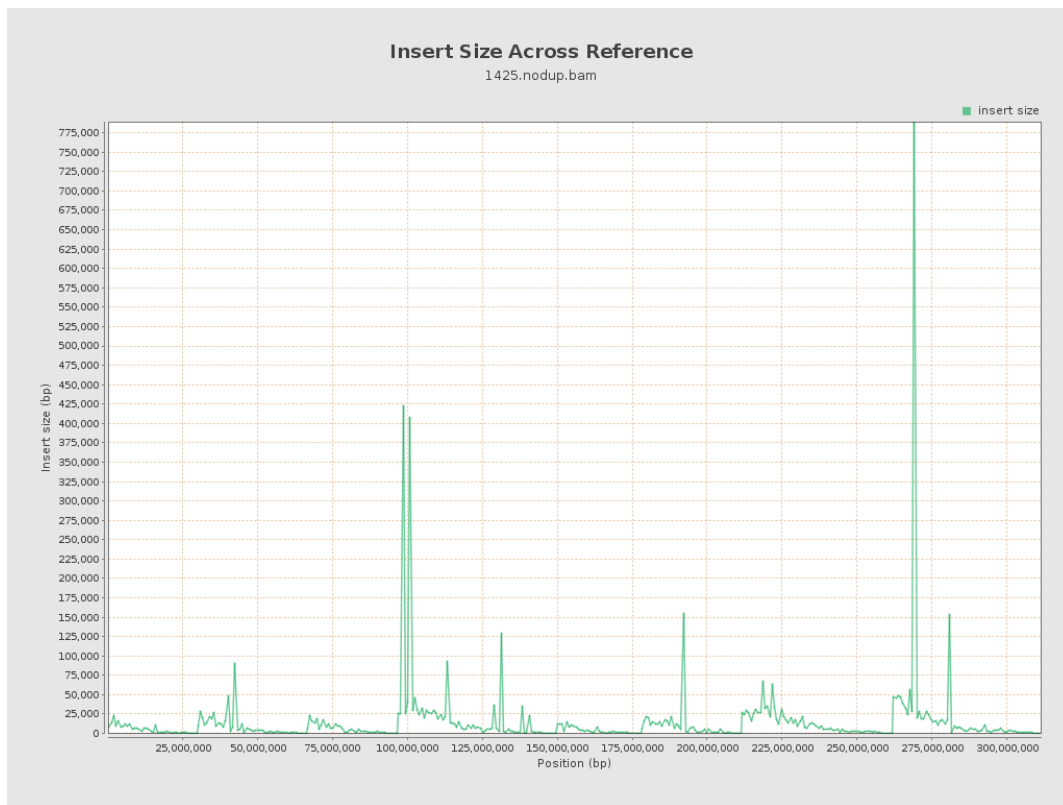
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

