

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2023/05/29 21:26:27

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/Fr2
.nodup.bam -nw 400 -hm 3
```

1.2. Alignment

| | |
|---------------------------------------|---|
| BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ Fr2 .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_104/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_104_S194_L002 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_104/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_104_S194_L002 _R2_001.fastq.gz |
| Size of a homopolymer: | 3 |
| Number of windows: | 400 |

| | |
|----------------------------|-------------------------------|
| Analysis date: | Mon May 29 21:26:27 CEST 2023 |
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |

2. Summary

2.1. Globals

| | |
|------------------------------|---------------------|
| Reference size | 311,642,060 |
| Number of reads | 52,673,842 |
| Mapped reads | 48,386,496 / 91.86% |
| Unmapped reads | 4,287,346 / 8.14% |
| Mapped paired reads | 48,386,496 / 91.86% |
| Mapped reads, first in pair | 24,228,996 / 46% |
| Mapped reads, second in pair | 24,157,500 / 45.86% |
| Mapped reads, both in pair | 47,720,969 / 90.6% |
| Mapped reads, singletons | 665,527 / 1.26% |
| Read min/max/mean length | 30 / 151 / 148.55 |
| Duplicated reads (flagged) | 6,819,266 / 12.95% |
| Clipped reads | 9,425,023 / 17.89% |

2.2. ACGT Content

| | |
|--------------------------|------------------------|
| Number/percentage of A's | 2,099,244,078 / 30.89% |
| Number/percentage of C's | 1,300,054,288 / 19.13% |
| Number/percentage of T's | 2,102,098,136 / 30.93% |
| Number/percentage of G's | 1,293,975,406 / 19.04% |
| Number/percentage of N's | 28,600 / 0% |
| GC Percentage | 38.17% |

2.3. Coverage

| | |
|--------------------|----------|
| Mean | 21.8547 |
| Standard Deviation | 150.4733 |

2.4. Mapping Quality

| | |
|----------------------|-------|
| Mean Mapping Quality | 45.52 |
|----------------------|-------|

2.5. Insert size

| | |
|--------------------|-----------------|
| Mean | 183,017.58 |
| Standard Deviation | 2,021,074.58 |
| P25/Median/P75 | 323 / 421 / 548 |

2.6. Mismatches and indels

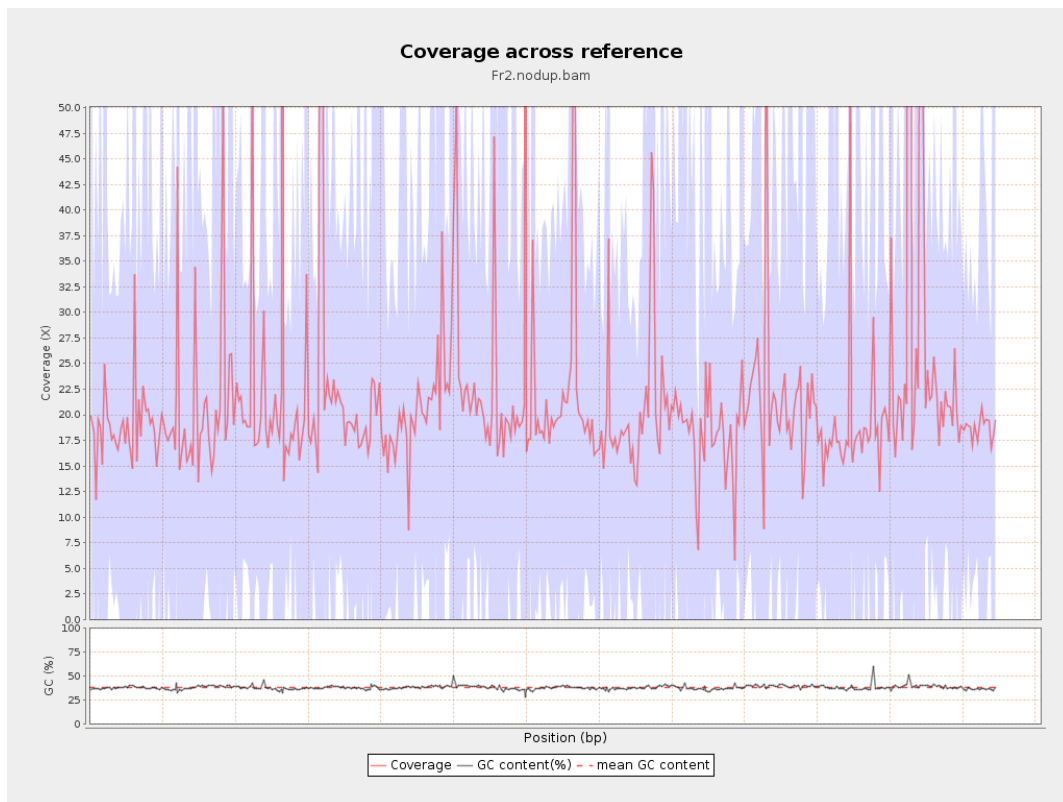
| | |
|--|-------------|
| General error rate | 2.02% |
| Mismatches | 126,060,458 |
| Insertions | 3,972,469 |
| Mapped reads with at least one insertion | 7.44% |
| Deletions | 4,149,966 |
| Mapped reads with at least one deletion | 7.67% |
| Homopolymer indels | 57.17% |

2.7. Chromosome stats

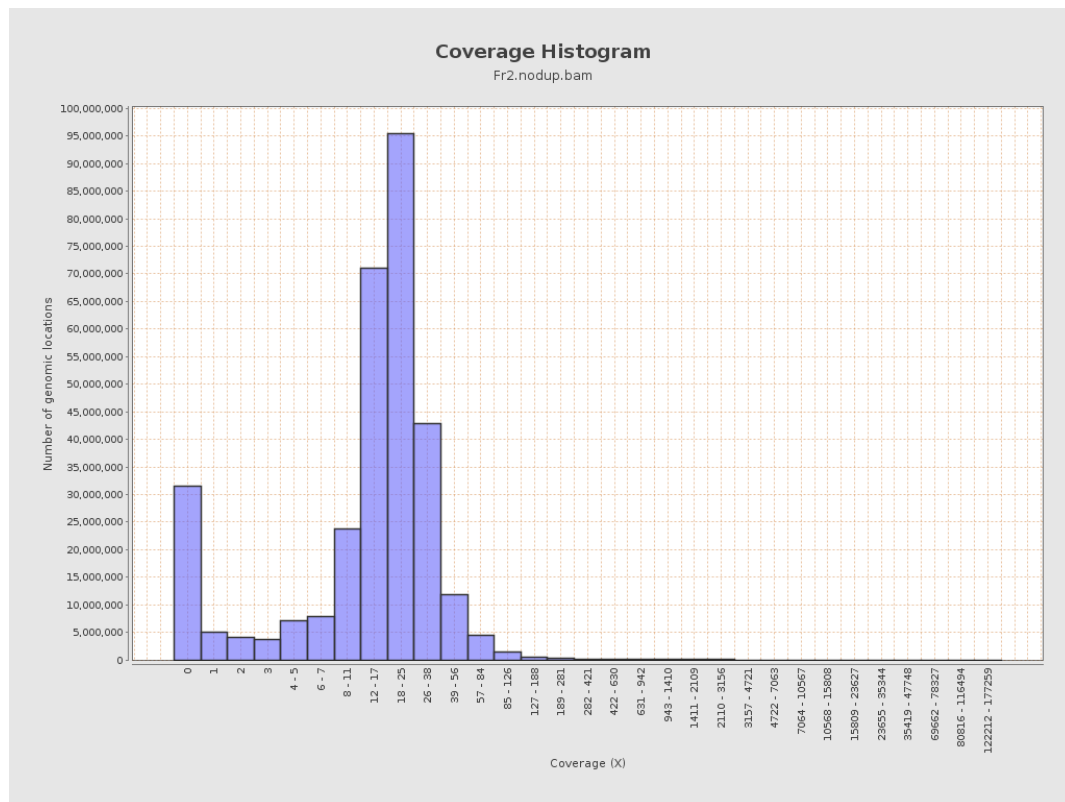
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|---------------|--------------------|
| LT669788.1 | 29724344 | 558989546 | 18.8058 | 31.7425 |

| | | | | |
|------------|----------|------------|---------|----------|
| LT669789.1 | 36598175 | 797412533 | 21.7883 | 159.1668 |
| LT669790.1 | 30422129 | 673540626 | 22.1398 | 112.0379 |
| LT669791.1 | 52758100 | 1128562031 | 21.3913 | 101.8124 |
| LT669792.1 | 28376109 | 613656573 | 21.6258 | 165.3274 |
| LT669793.1 | 33388210 | 660861225 | 19.7933 | 77.0959 |
| LT669794.1 | 50579949 | 1032169228 | 20.4067 | 124.8361 |
| LT669795.1 | 49795044 | 1345660861 | 27.024 | 261.543 |

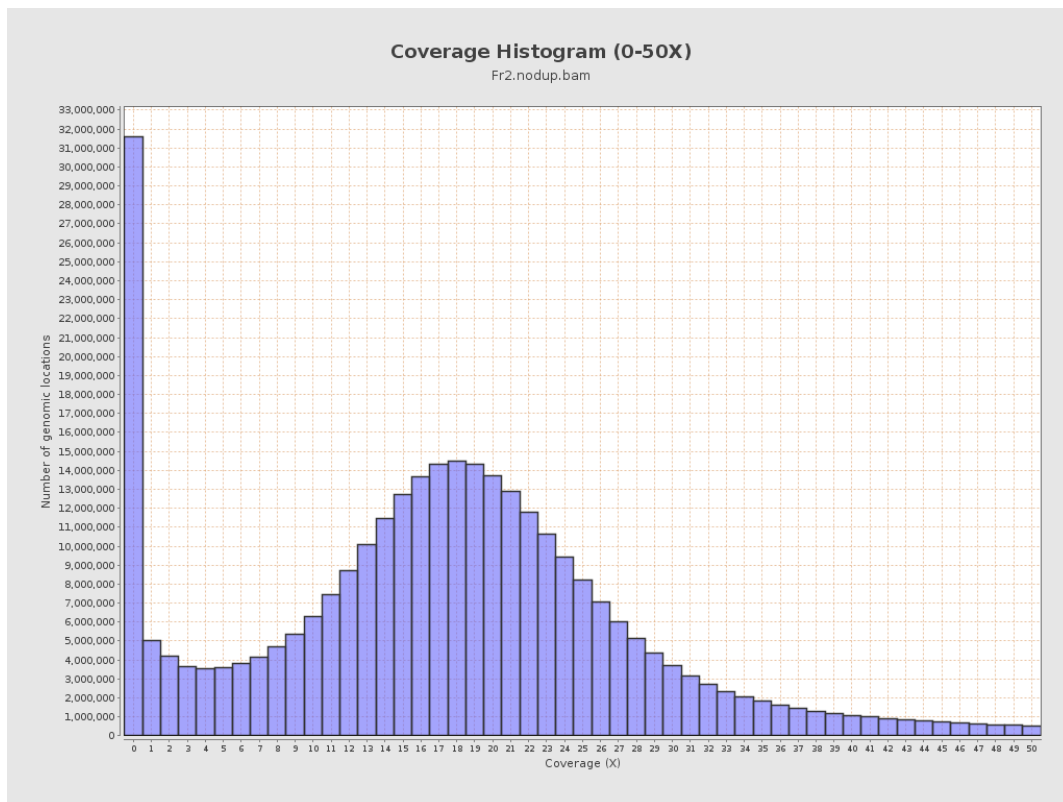
3. Results : Coverage across reference



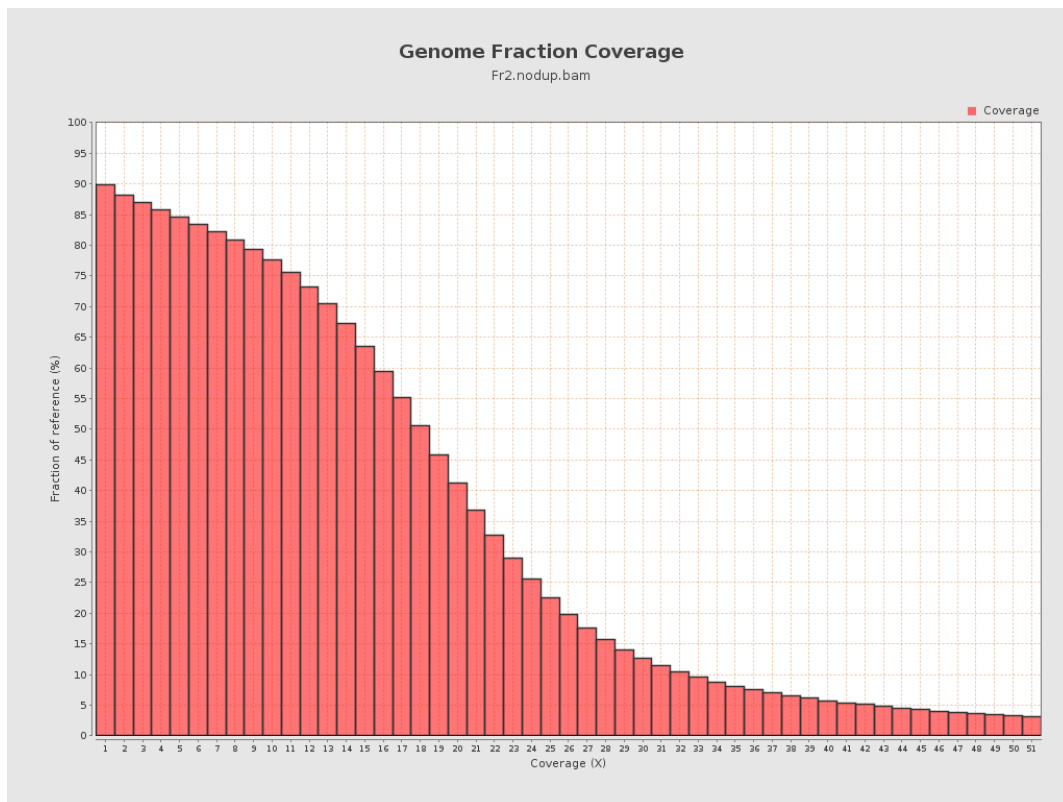
4. Results : Coverage Histogram



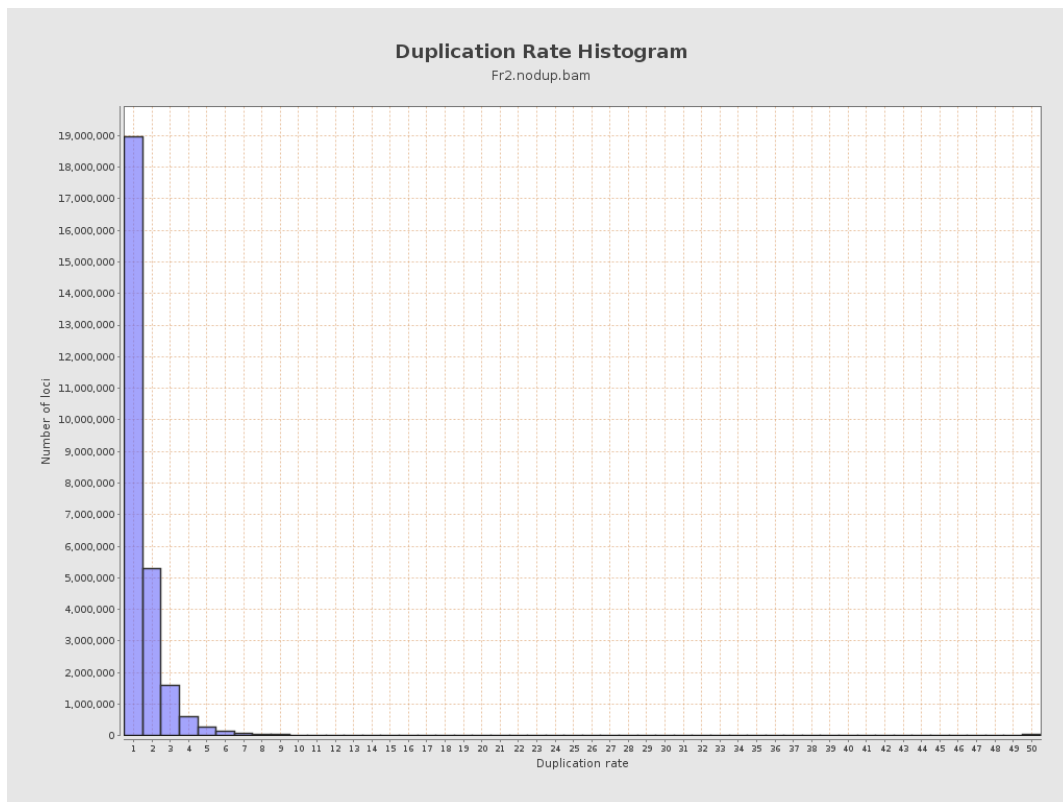
5. Results : Coverage Histogram (0-50X)



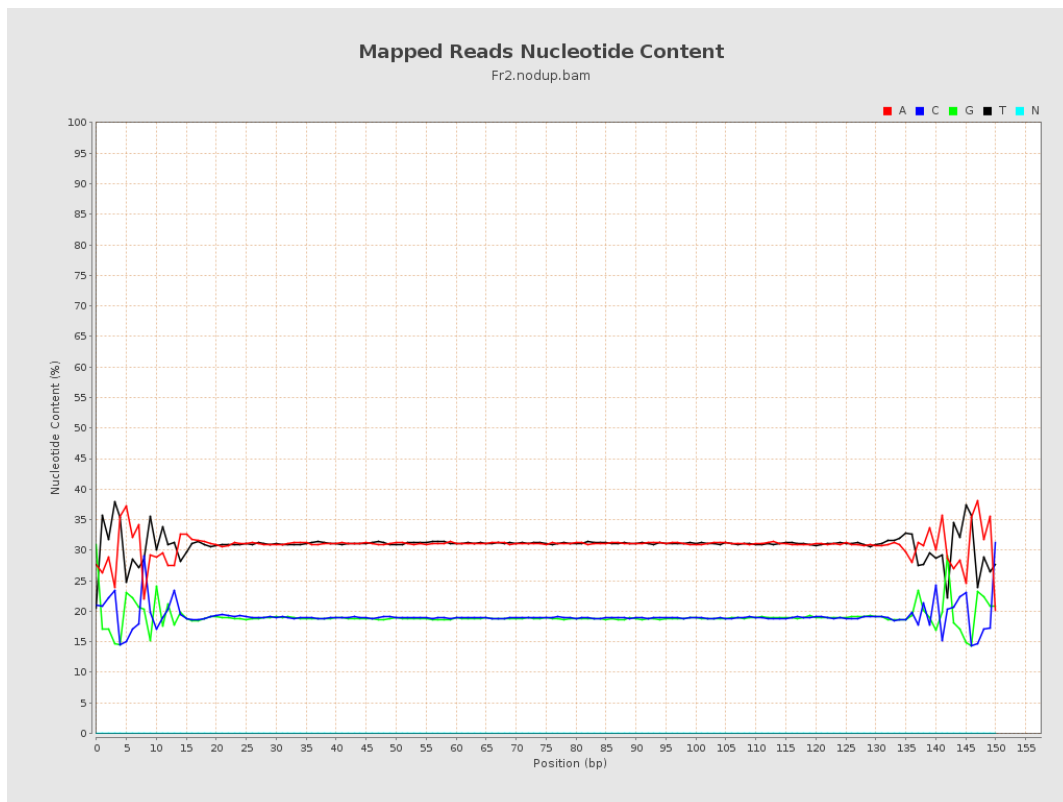
6. Results : Genome Fraction Coverage



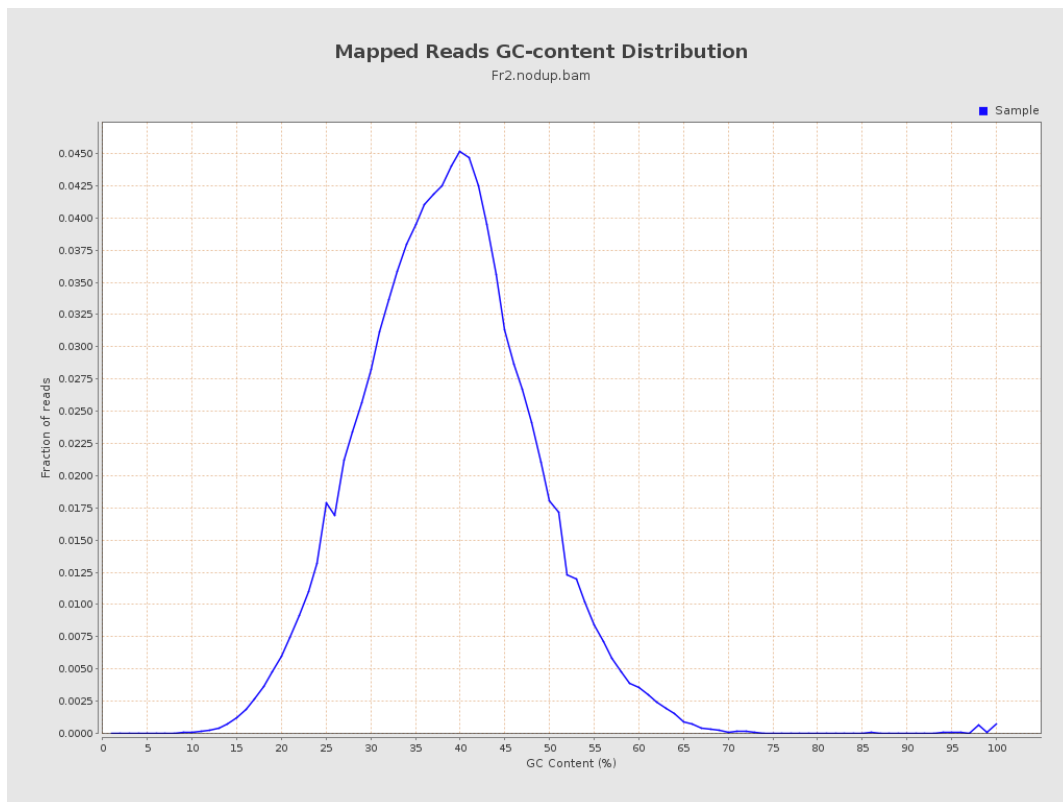
7. Results : Duplication Rate Histogram



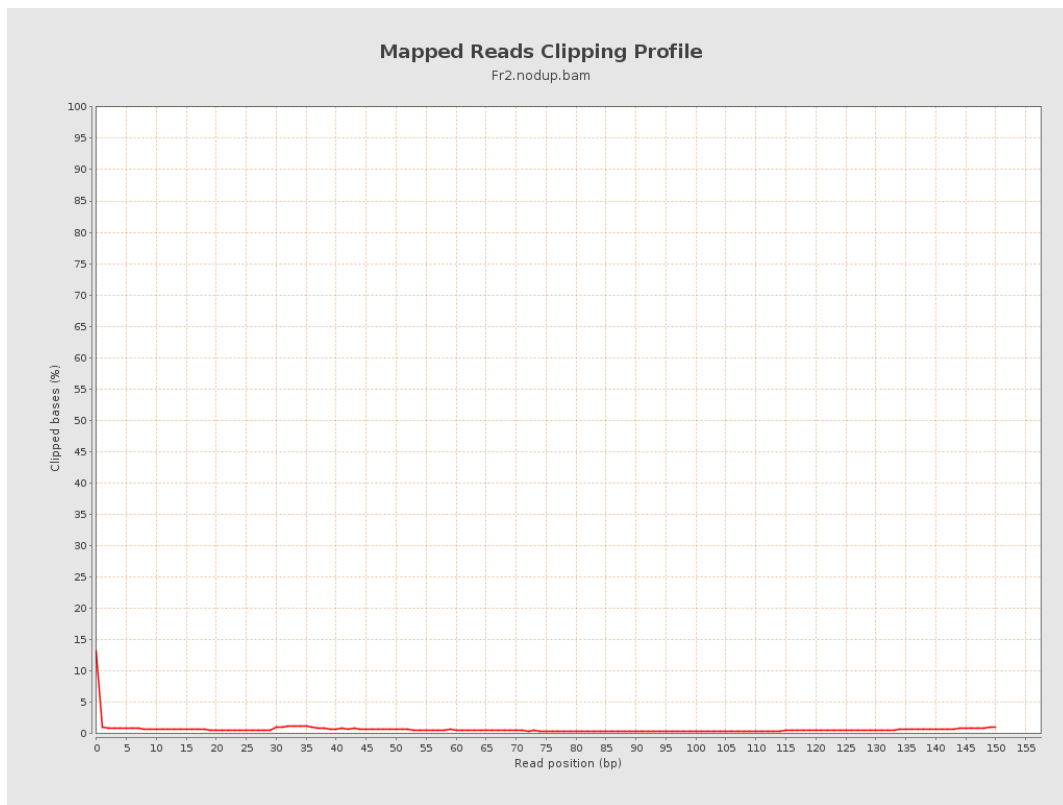
8. Results : Mapped Reads Nucleotide Content



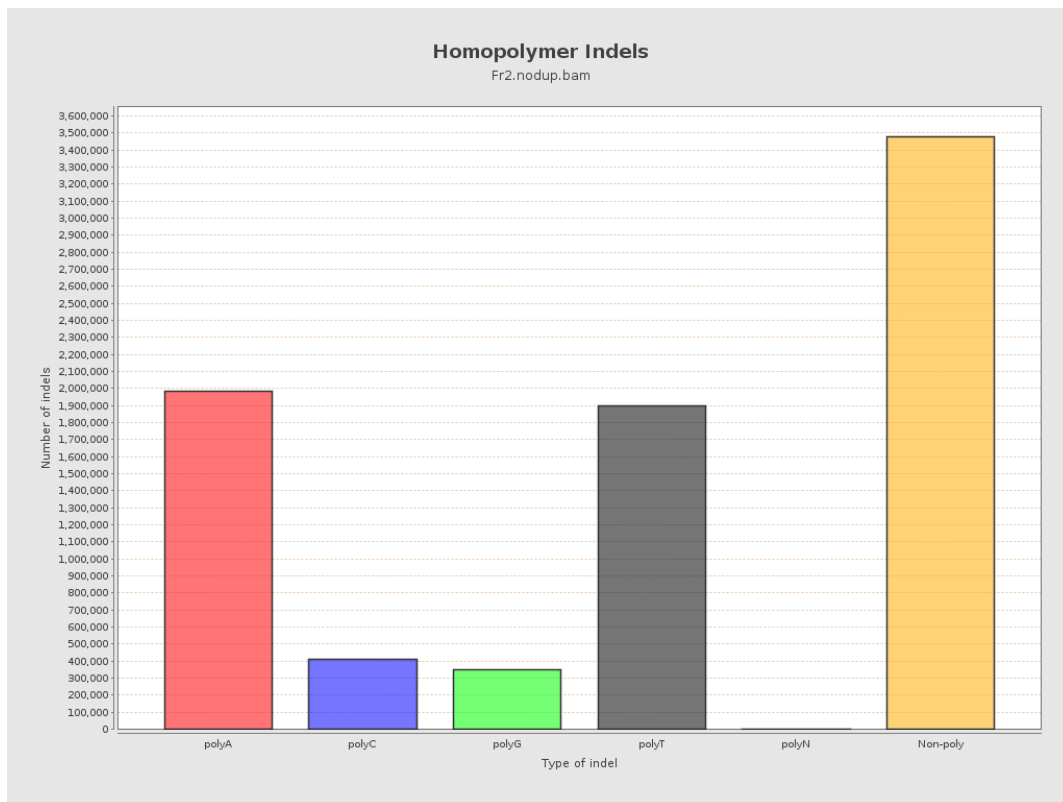
9. Results : Mapped Reads GC-content Distribution



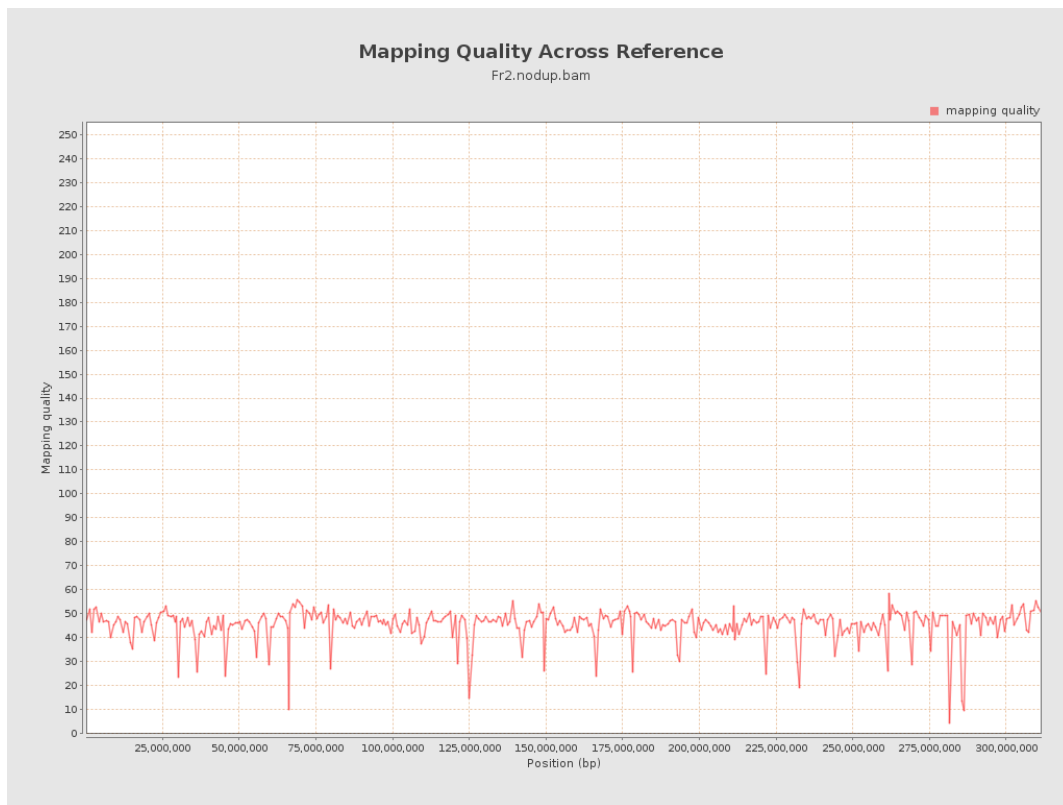
10. Results : Mapped Reads Clipping Profile



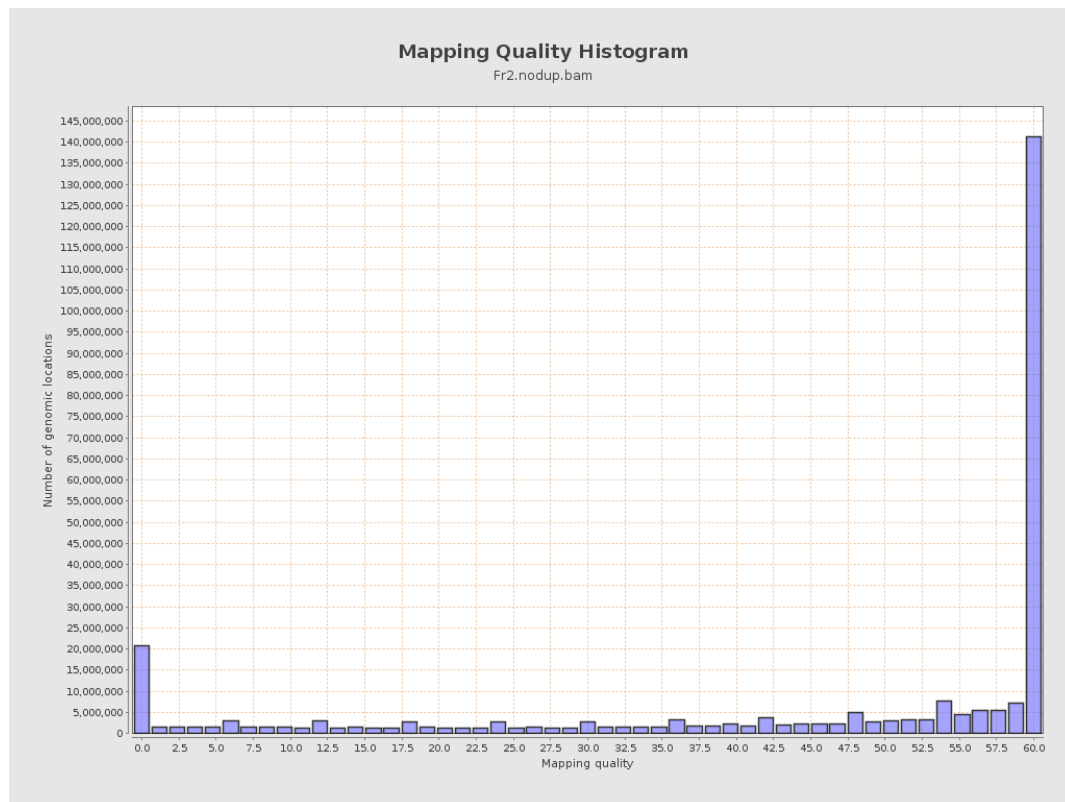
11. Results : Homopolymer Indels



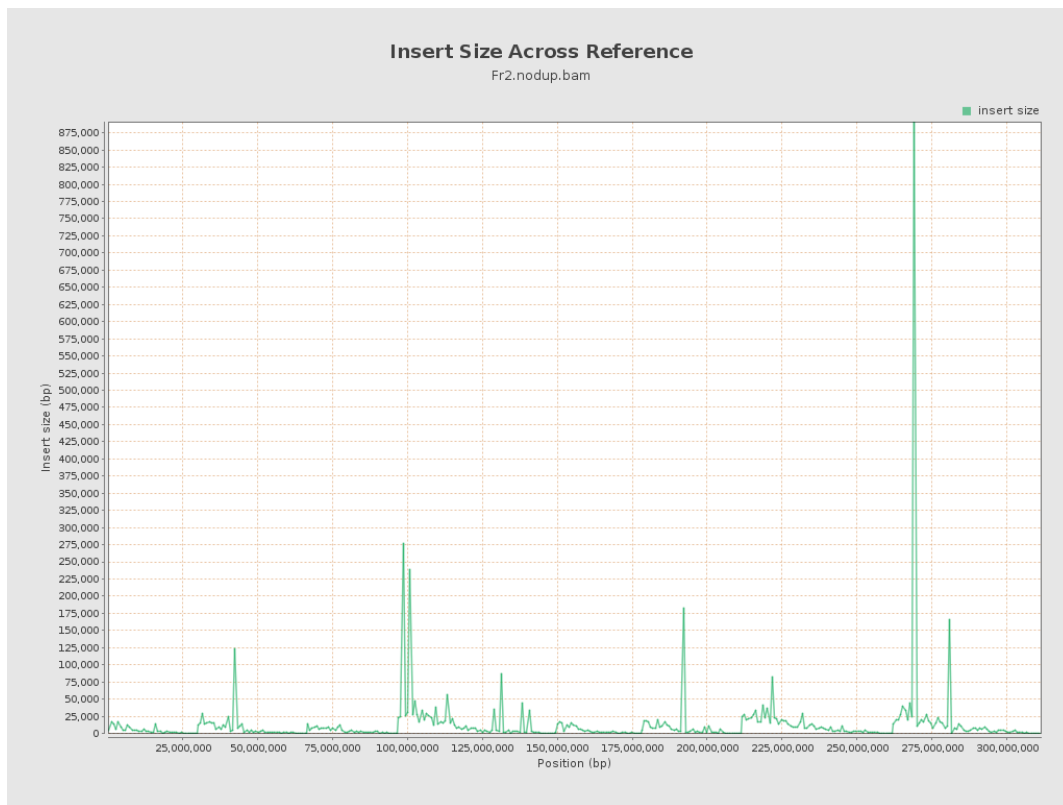
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

