# Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.2-dev 2022/03/01 02:00:23



### 1. Input data & parameters

#### 1.1. QualiMap command line

qualimap bamqc -bam output/UF11/UF11\_f4\_q37\_sortc\_markdup.rescaled.bam -nw 400 -hm 3

#### 1.2. Alignment

Command line:	bwa samse -r @RG\tID:UF11\tSM:UF11\tLB:nan\tP L:ILLUMINA /data/stonelab/references/M_leprae_ TN/M_leprae_TN.fasta output/UF11/UF11-ancient.sai output/UF11/UF11- ancient.trimmed.fq	
Draw chromosome limits:	no	
Analyze overlapping paired-end reads:	no	
Program:	bwa (0.7.17-r1188)	
Analysis date:	Tue Mar 01 02:00:22 MST 2022	
Size of a homopolymer:	3	
Skip duplicate alignments:	no	
Number of windows:	400	
BAM file:	output/UF11/UF11_f4_q37_sortc_markdup.rescaled.bam	



### 2. Summary

#### 2.1. Globals

Reference size	3,268,203	
Number of reads	329,469	
Mapped reads	329,469 / 100%	
Unmapped reads	0 / 0%	
Mapped paired reads	0 / 0%	
Secondary alignments	0	
Read min/max/mean length	30 / 141 / 62.18	
Duplicated reads (estimated)	49,758 / 15.1%	
Duplication rate	14.32%	
Clipped reads	1 / 0%	

#### 2.2. ACGT Content

Number/percentage of A's	4,921,774 / 24.03%	
Number/percentage of C's	4,861,928 / 23.73%	
Number/percentage of T's	4,976,365 / 24.29%	
Number/percentage of G's	5,724,171 / 27.94%	
Number/percentage of N's	14 / 0%	
GC Percentage	51.68%	

#### 2.3. Coverage

Mean	6.2682
Standard Deviation	7.9391



#### 2.4. Mapping Quality

Mean Mapping Quality	37
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#### 2.5. Mismatches and indels

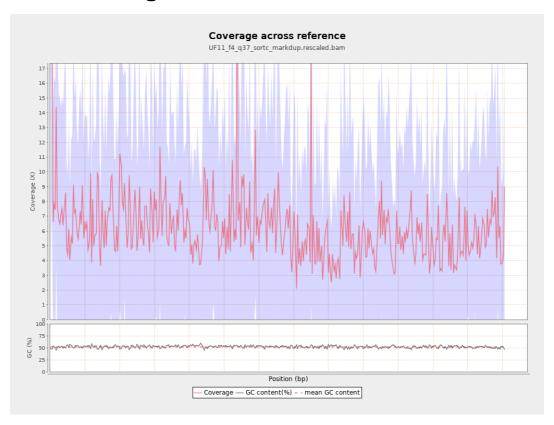
General error rate	0.26%	
Mismatches	52,741	
Insertions	467	
Mapped reads with at least one insertion	0.14%	
Deletions	1,342	
Mapped reads with at least one deletion	0.41%	
Homopolymer indels	42.18%	

#### 2.6. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation
ENA AL4503 80 AL450380.	3268203	20485773	6.2682	7.9391
1				

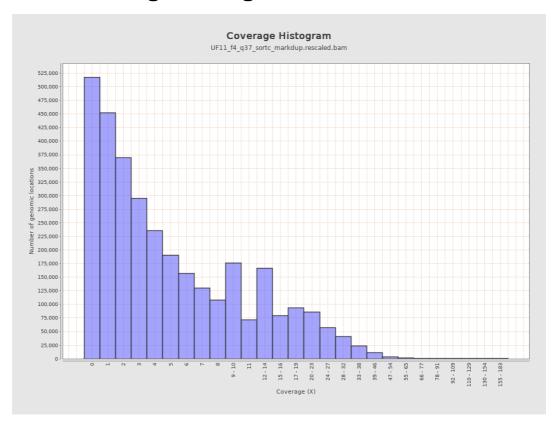


## 3. Results : Coverage across reference



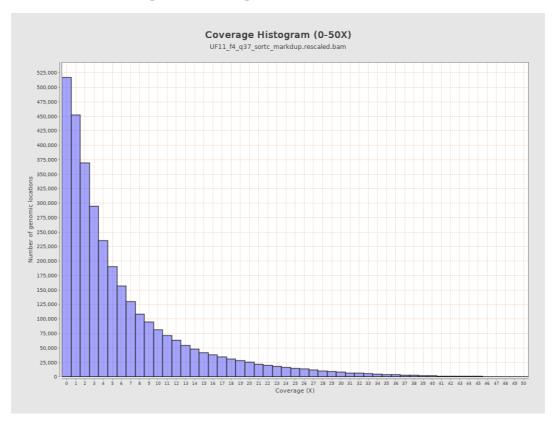


## 4. Results : Coverage Histogram



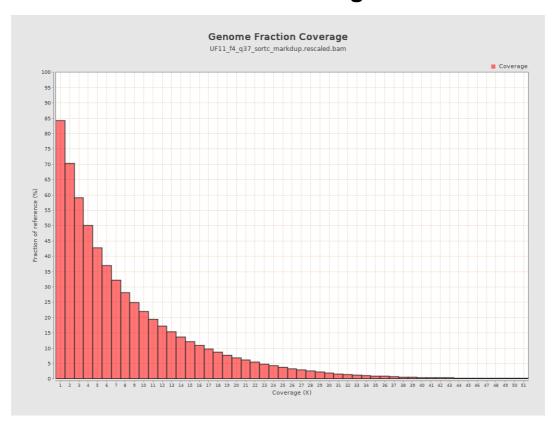


## 5. Results: Coverage Histogram (0-50X)



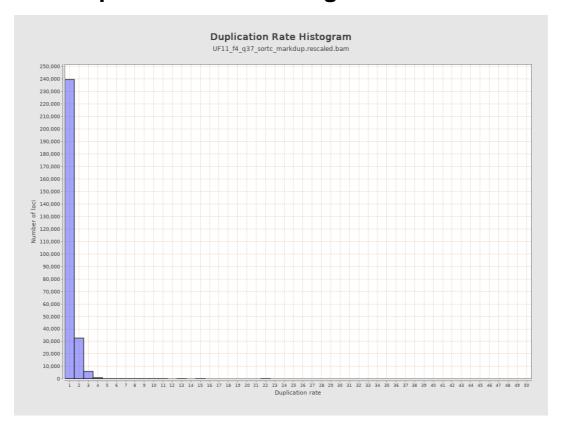


## 6. Results : Genome Fraction Coverage



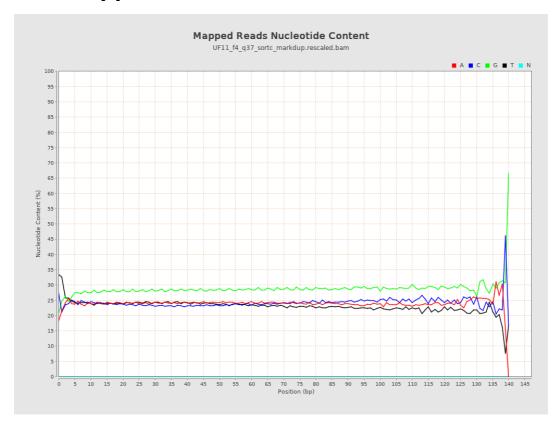


### 7. Results: Duplication Rate Histogram



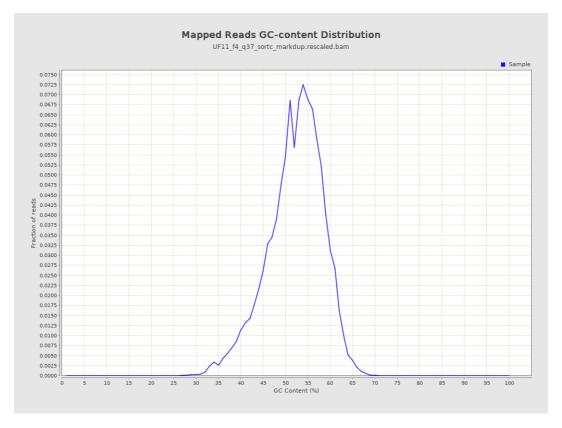


## 8. Results: Mapped Reads Nucleotide Content



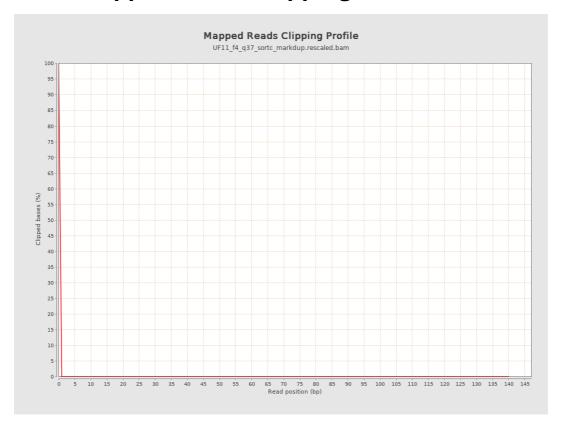


### 9. Results: Mapped Reads GC-content Distribution



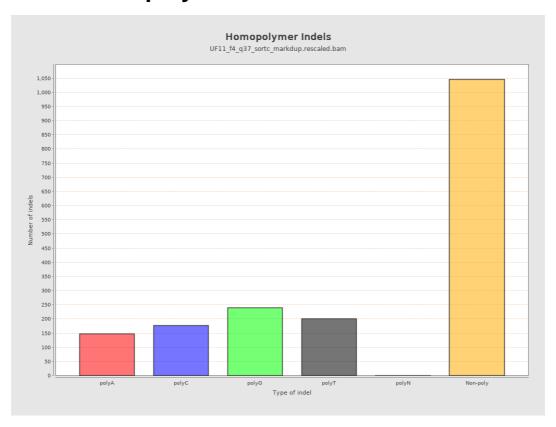


## 10. Results: Mapped Reads Clipping Profile



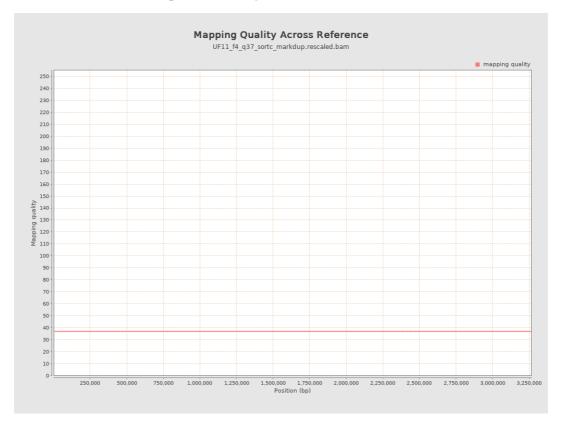


# 11. Results : Homopolymer Indels





## 12. Results: Mapping Quality Across Reference





## 13. Results: Mapping Quality Histogram

