# Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.2-dev 2022/03/01 02:29:09



#### 1. Input data & parameters

#### 1.1. QualiMap command line

qualimap bamqc -bam output/UF703/UF703\_f4\_q37\_sortc\_markdup.rescaled.bam -nw 400 -hm 3

#### 1.2. Alignment

Command line:	bwa samse -r @RG\tID:UF703\tSM:UF703\tLB:nan\ tPL:ILLUMINA /data/stonelab/references/M_leprae_ TN/M_leprae_TN.fasta output/UF703/UF703-ancient.sai output/UF703/UF703- ancient.trimmed.fq	
Draw chromosome limits:	no	
Analyze overlapping paired-end reads:	no	
Program:	bwa (0.7.17-r1188)	
Analysis date:	Tue Mar 01 02:29:08 MST 2022	
Size of a homopolymer:	3	
Skip duplicate alignments:	no	
Number of windows:	400	
BAM file:	output/UF703/UF703_f4_q37_sortc_ markdup.rescaled.bam	



### 2. Summary

#### 2.1. Globals

Reference size	3,268,203		
Number of reads	1,202,332		
Mapped reads	1,202,332 / 100%		
Unmapped reads	0 / 0%		
Mapped paired reads	0 / 0%		
Secondary alignments	0		
Read min/max/mean length	30 / 141 / 68.31		
Duplicated reads (estimated)	317,749 / 26.43%		
Duplication rate	26.41%		
Clipped reads	7 / 0%		

#### 2.2. ACGT Content

Number/percentage of A's	18,678,775 / 22.74%	
Number/percentage of C's	21,083,849 / 25.67%	
Number/percentage of T's	18,896,749 / 23.01%	
Number/percentage of G's	23,463,775 / 28.57%	
Number/percentage of N's	21 / 0%	
GC Percentage	54.24%	

#### 2.3. Coverage

Mean	25.1313
Standard Deviation	17.6209



#### 2.4. Mapping Quality

Mean Mapping Quality	36.99

#### 2.5. Mismatches and indels

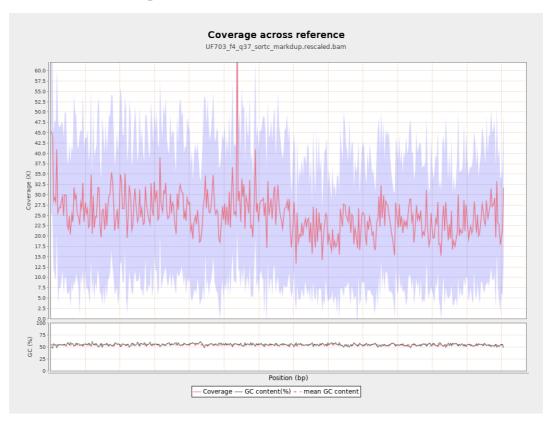
General error rate	0.16%	
Mismatches	129,154	
Insertions	1,829	
Mapped reads with at least one insertion	0.15%	
Deletions	9,617	
Mapped reads with at least one deletion	0.8%	
Homopolymer indels	39.9%	

#### 2.6. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation
ENA AL4503 80 AL450380.	3268203	82134347	25.1313	17.6209
1				

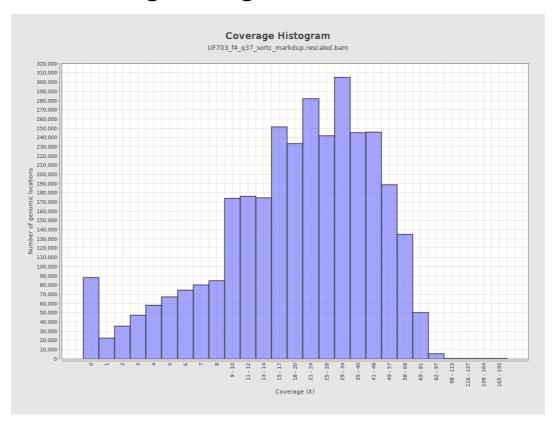


### 3. Results: Coverage across reference



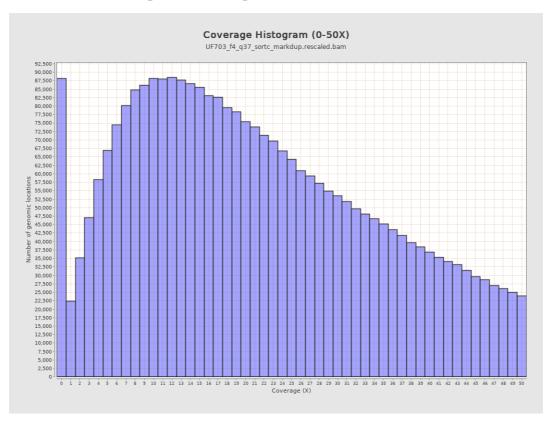


### 4. Results: Coverage Histogram



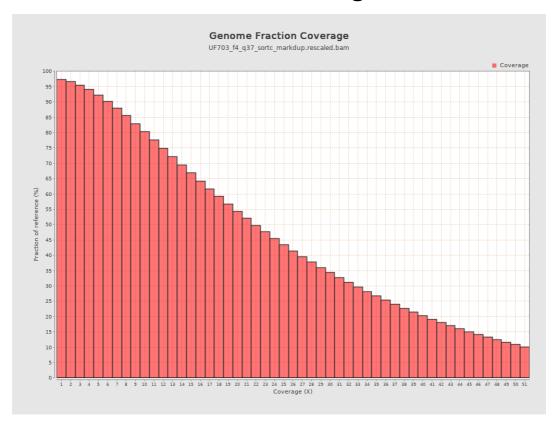


## 5. Results: Coverage Histogram (0-50X)



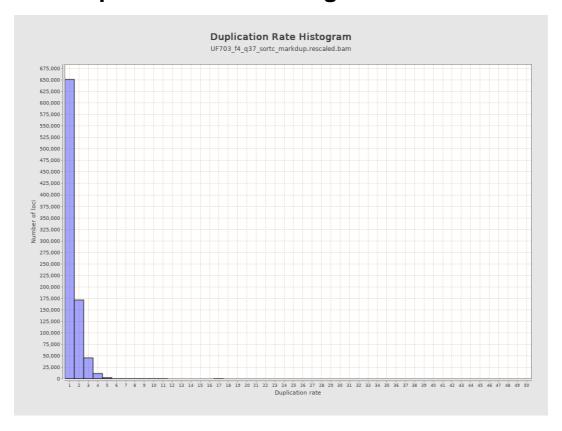


## 6. Results : Genome Fraction Coverage



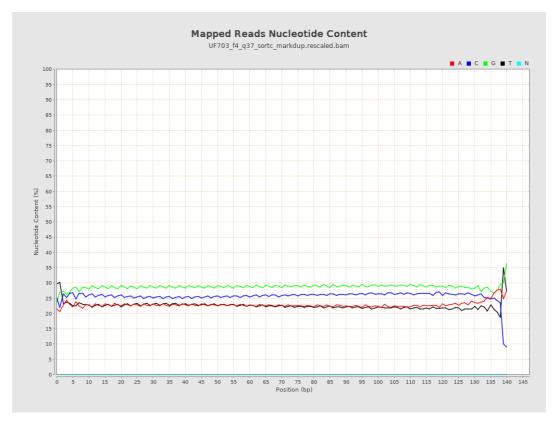


### 7. Results: Duplication Rate Histogram



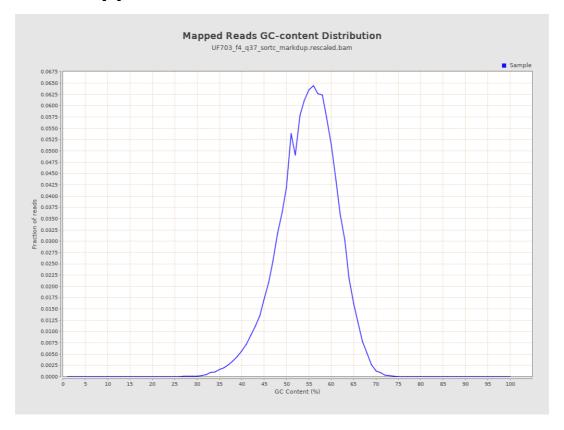


## 8. Results: Mapped Reads Nucleotide Content



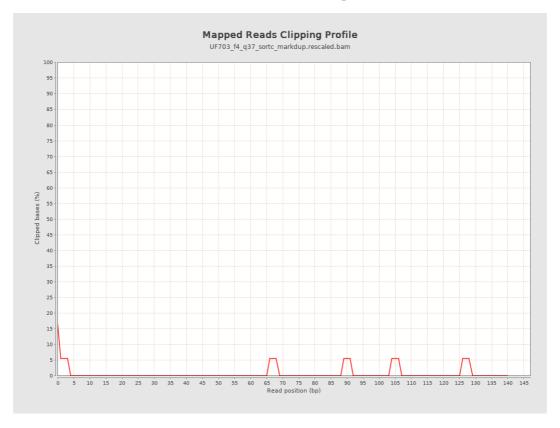


### 9. Results: Mapped Reads GC-content Distribution



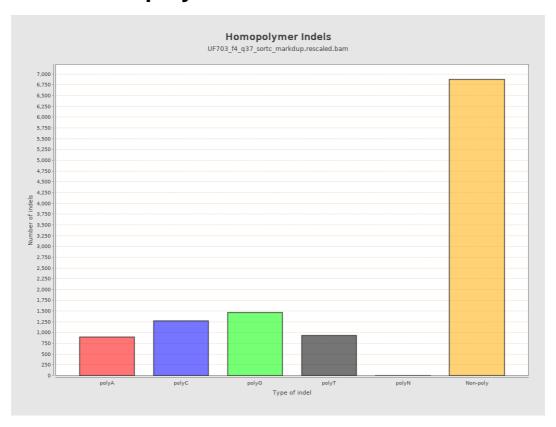


## 10. Results: Mapped Reads Clipping Profile



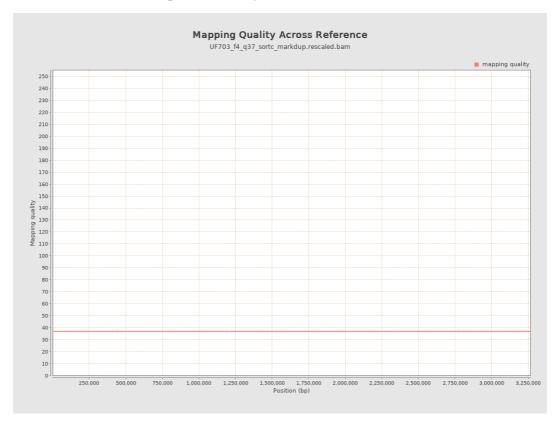


# 11. Results : Homopolymer Indels





## 12. Results: Mapping Quality Across Reference





## 13. Results: Mapping Quality Histogram

