# Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.2-dev 2022/03/01 02:20:45



#### 1. Input data & parameters

#### 1.1. QualiMap command line

qualimap bamqc -bam output/UF800/UF800\_f4\_q37\_sortc\_markdup.rescaled.bam -nw 400 -hm 3

#### 1.2. Alignment

Command line:	bwa samse -r @RG\tID:UF800\tSM:UF800\tLB:nan\ tPL:ILLUMINA /data/stonelab/references/M_leprae_ TN/M_leprae_TN.fasta output/UF800/UF800-ancient.sai output/UF800/UF800- ancient.trimmed.fq	
Draw chromosome limits:	no	
Analyze overlapping paired-end reads:	no	
Program:	bwa (0.7.17-r1188)	
Analysis date:	Tue Mar 01 02:20:44 MST 2022	
Size of a homopolymer:	3	
Skip duplicate alignments:	no	
Number of windows:	400	
BAM file:	output/UF800/UF800_f4_q37_sortc_ markdup.rescaled.bam	



## 2. Summary

#### 2.1. Globals

Reference size	3,268,203		
Number of reads	61,399		
Mapped reads	61,399 / 100%		
Unmapped reads	0 / 0%		
Mapped paired reads	0 / 0%		
Secondary alignments	0		
Read min/max/mean length	30 / 141 / 74.2		
Duplicated reads (estimated)	3,108 / 5.06%		
Duplication rate	3.71%		
Clipped reads	0 / 0%		

#### 2.2. ACGT Content

Number/percentage of A's	1,045,673 / 22.95%		
Number/percentage of C's	1,160,907 / 25.48%		
Number/percentage of T's	1,050,296 / 23.06%		
Number/percentage of G's	1,298,643 / 28.51%		
Number/percentage of N's	2 / 0%		
GC Percentage	53.99%		

#### 2.3. Coverage

Mean	1.3941
Standard Deviation	3.2916



#### 2.4. Mapping Quality

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

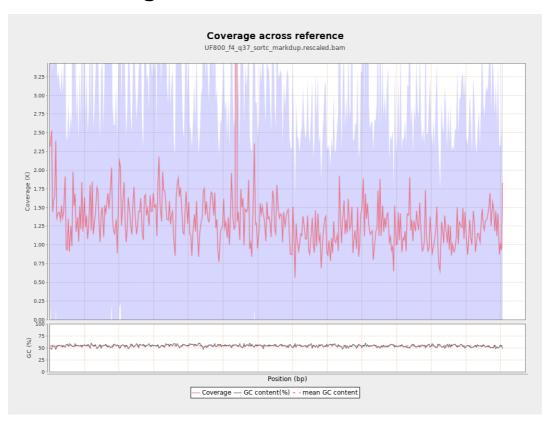
General error rate	0.81%
Mismatches	36,816
Insertions	262
Mapped reads with at least one insertion	0.43%
Deletions	541
Mapped reads with at least one deletion	0.88%
Homopolymer indels	38.85%

#### 2.6. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation
ENA AL4503 80 AL450380.	3268203	4556103	1.3941	3.2916
1				

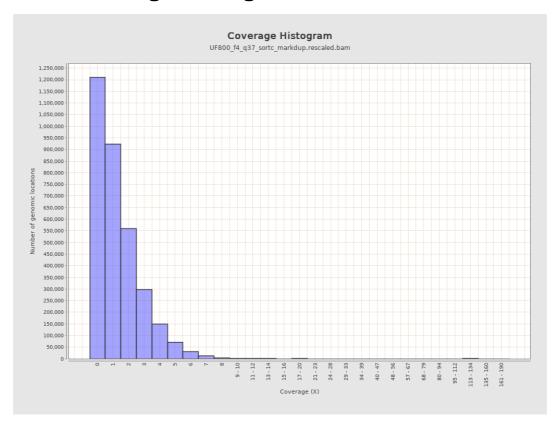


## 3. Results: Coverage across reference



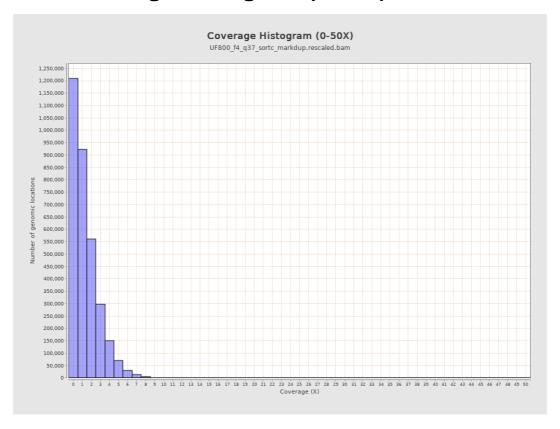


## 4. Results: Coverage Histogram



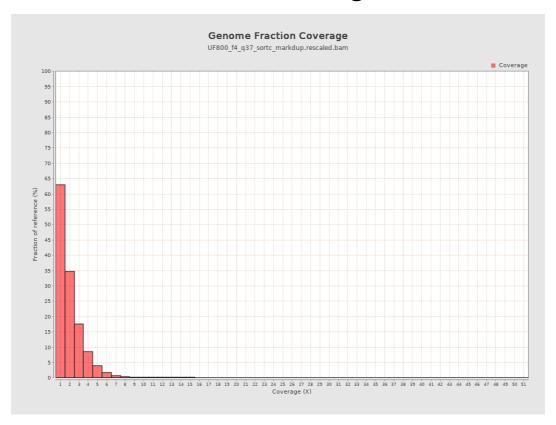


## 5. Results : Coverage Histogram (0-50X)



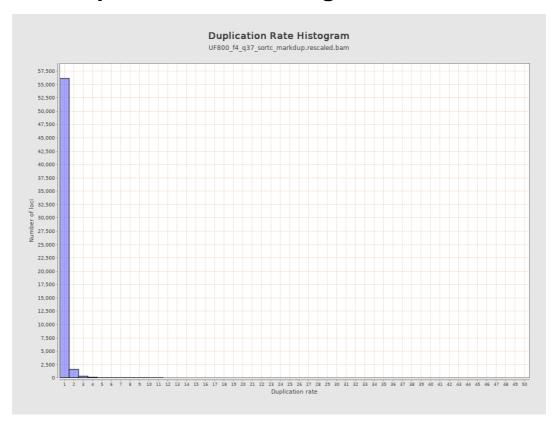


## 6. Results : Genome Fraction Coverage



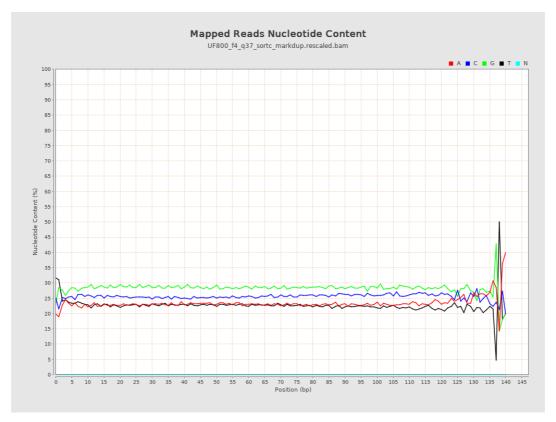


## 7. Results: Duplication Rate Histogram



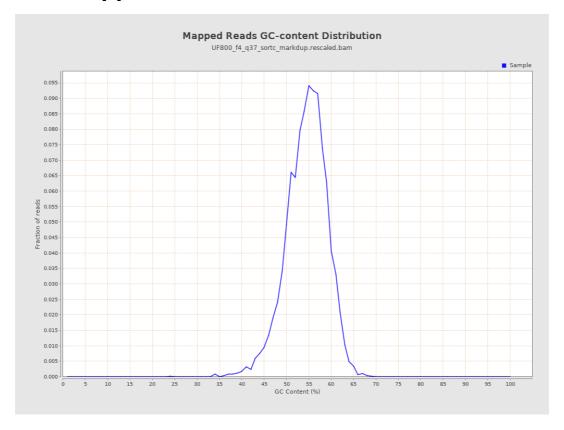


## 8. Results: Mapped Reads Nucleotide Content



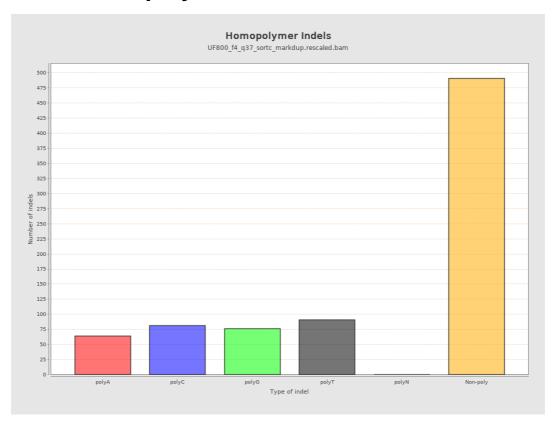


## 9. Results: Mapped Reads GC-content Distribution



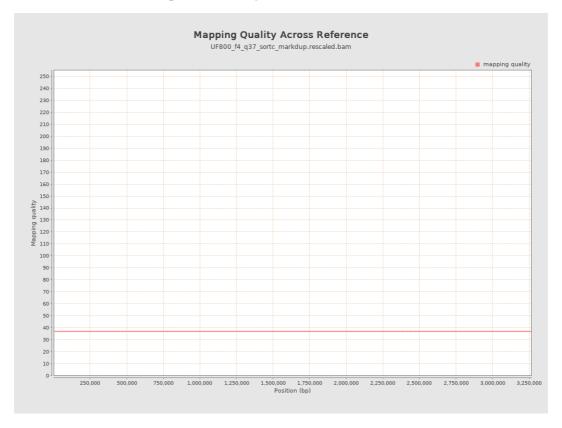


# 10. Results : Homopolymer Indels





## 11. Results: Mapping Quality Across Reference





## 12. Results: Mapping Quality Histogram

