# Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.2-dev 2022/03/01 02:29:25



### 1. Input data & parameters

### 1.1. QualiMap command line

qualimap bamqc -bam output/UF803/UF803\_f4\_q37\_sortc\_markdup.rescaled.bam -nw 400 -hm 3

#### 1.2. Alignment

Command line:	bwa samse -r @RG\tID:UF803\tSM:UF803\tLB:nan\ tPL:ILLUMINA /data/stonelab/references/M_leprae_ TN/M_leprae_TN.fasta output/UF803/UF803-ancient.sai output/UF803/UF803- ancient.trimmed.fq	
Draw chromosome limits:	no	
Analyze overlapping paired-end reads:	no	
Program:	bwa (0.7.17-r1188)	
Analysis date:	Tue Mar 01 02:29:25 MST 2022	
Size of a homopolymer:	3	
Skip duplicate alignments:	no	
Number of windows:	400	
BAM file:	output/UF803/UF803_f4_q37_sortc_ markdup.rescaled.bam	



### 2. Summary

#### 2.1. Globals

Reference size	3,268,203	
Number of reads	238,128	
Mapped reads	238,128 / 100%	
Unmapped reads	0 / 0%	
Mapped paired reads	0 / 0%	
Secondary alignments	0	
Read min/max/mean length	30 / 139 / 72.63	
Duplicated reads (estimated)	21,406 / 8.99%	
Duplication rate	8.47%	
Clipped reads	2 / 0%	

#### 2.2. ACGT Content

Number/percentage of A's	3,992,092 / 23.08%	
Number/percentage of C's	4,305,404 / 24.89%	
Number/percentage of T's	4,061,976 / 23.49%	
Number/percentage of G's	4,935,768 / 28.54%	
Number/percentage of N's	10 / 0%	
GC Percentage	53.43%	

### 2.3. Coverage

Mean	5.2924
Standard Deviation	6.2973



### 2.4. Mapping Quality

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

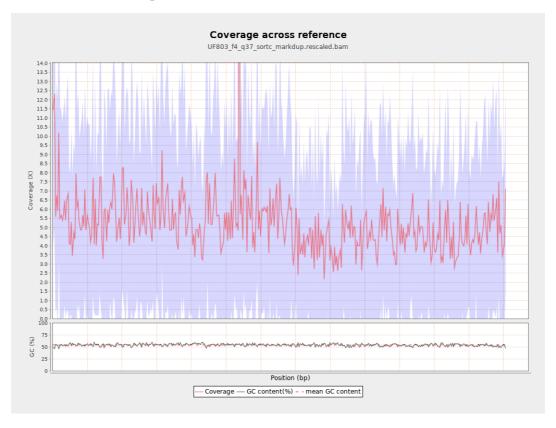
General error rate	0.31%
Mismatches	51,888
Insertions	871
Mapped reads with at least one insertion	0.37%
Deletions	1,302
Mapped reads with at least one deletion	0.55%
Homopolymer indels	39.16%

### 2.6. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation
ENA AL4503 80 AL450380.	3268203	17296764	5.2924	6.2973
1				

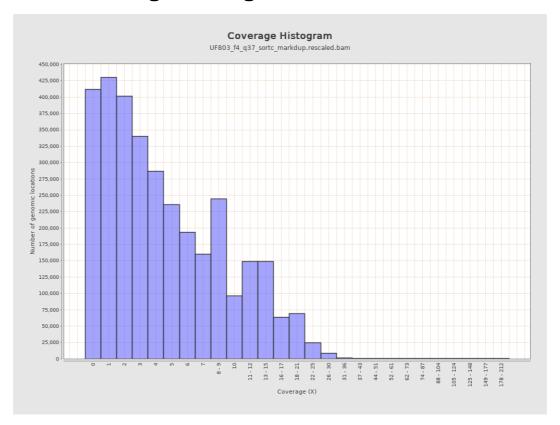


### 3. Results: Coverage across reference



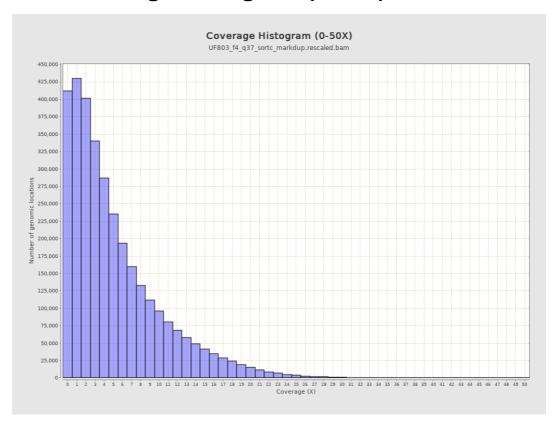


# 4. Results : Coverage Histogram



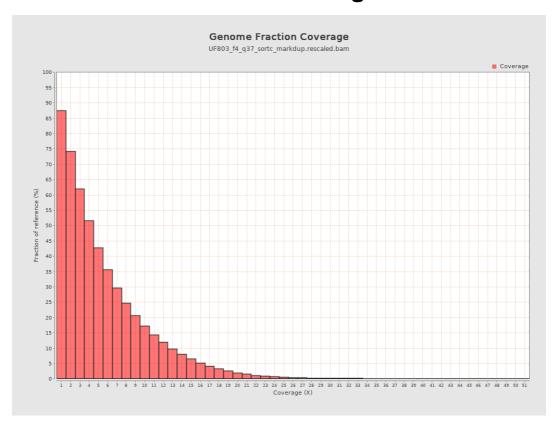


## 5. Results: Coverage Histogram (0-50X)



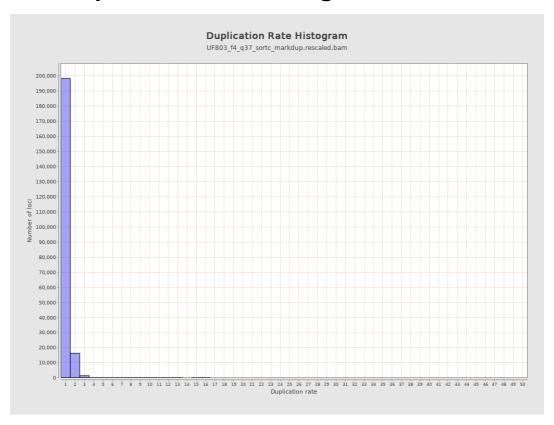


# 6. Results : Genome Fraction Coverage



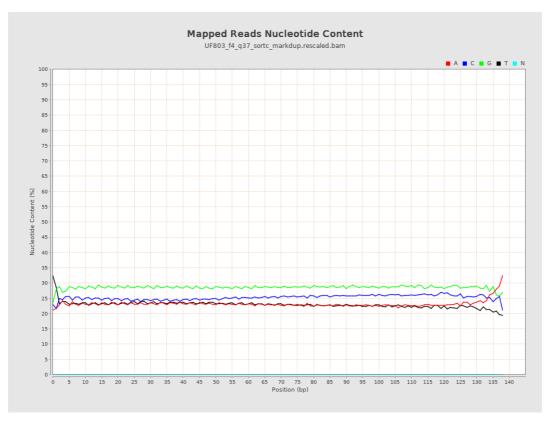


# 7. Results: Duplication Rate Histogram



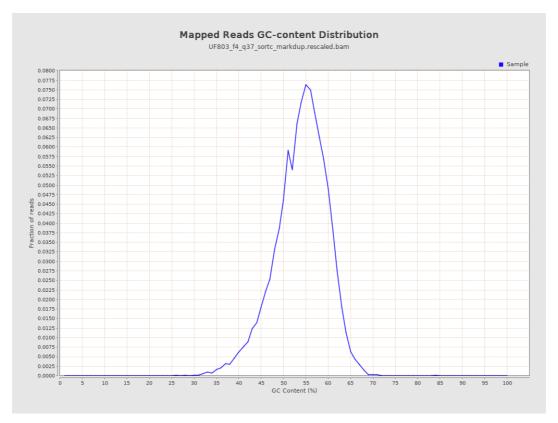


## 8. Results: Mapped Reads Nucleotide Content



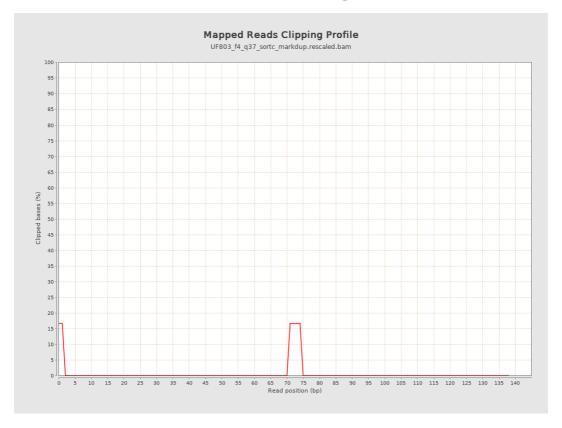


### 9. Results: Mapped Reads GC-content Distribution



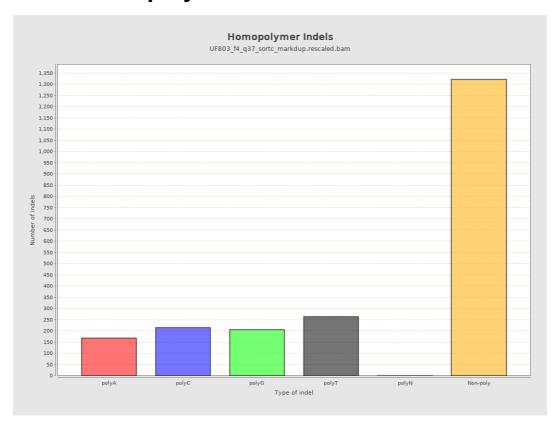


# 10. Results: Mapped Reads Clipping Profile



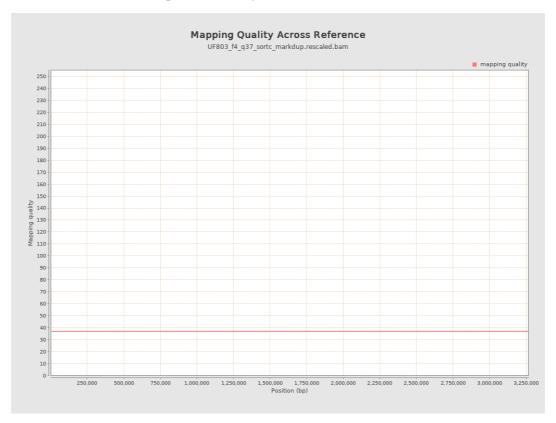


# 11. Results : Homopolymer Indels





## 12. Results: Mapping Quality Across Reference





# 13. Results: Mapping Quality Histogram

