# Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.2-dev 2022/03/02 03:10:40



#### 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/Human_mit ochondrial/NC_012920.1.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:	Wed Mar 02 03:10:39 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	16,569		
Number of reads	854		
Mapped reads	854 / 100%		
Unmapped reads	0 / 0%		
Mapped paired reads	0 / 0%		
Secondary alignments	0		
Read min/max/mean length	30 / 138 / 67.54		
Duplicated reads (estimated)	47 / 5.5%		
Duplication rate	5.7%		
Clipped reads	0 / 0%		

#### 2.2. ACGT Content

Number/percentage of A's	18,154 / 31.47%	
Number/percentage of C's	18,435 / 31.96%	
Number/percentage of T's	14,606 / 25.32%	
Number/percentage of G's	6,483 / 11.24%	
Number/percentage of N's	0 / 0%	
GC Percentage	43.2%	

#### 2.3. Coverage

Mean	3.4813
Standard Deviation	3.5492



#### 2.4. Mapping Quality

Many Manying Quality	04.74
Mean Mapping Quality	34.74

#### 2.5. Mismatches and indels

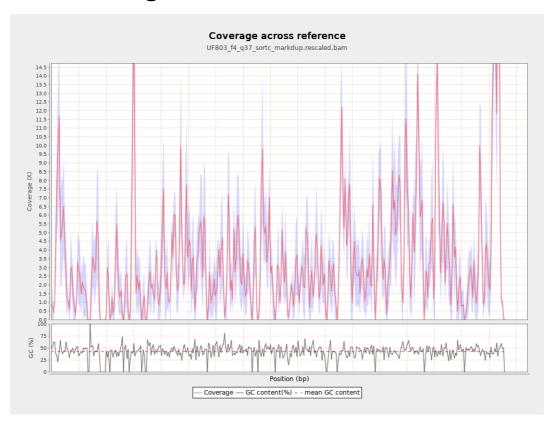
General error rate	0.41%
Mismatches	232
Insertions	3
Mapped reads with at least one insertion	0.35%
Deletions	3
Mapped reads with at least one deletion	0.35%
Homopolymer indels	50%

#### 2.6. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation
NC_012920.1	16569	57681	3.4813	3.5492

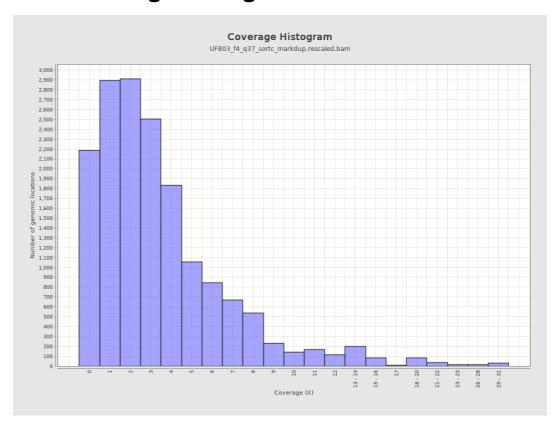


## 3. Results: Coverage across reference



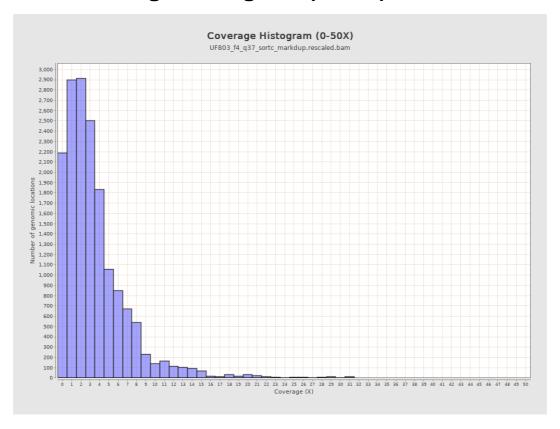


## 4. Results : Coverage Histogram



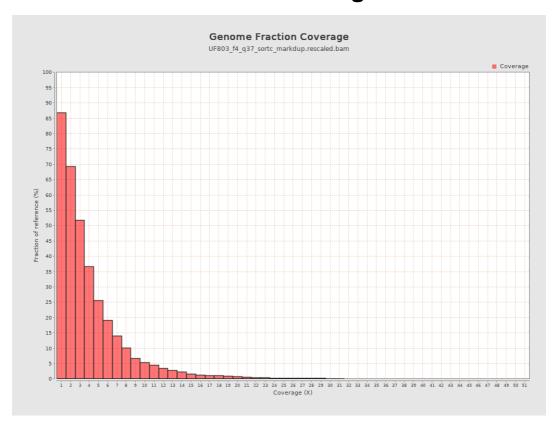


## 5. Results: Coverage Histogram (0-50X)



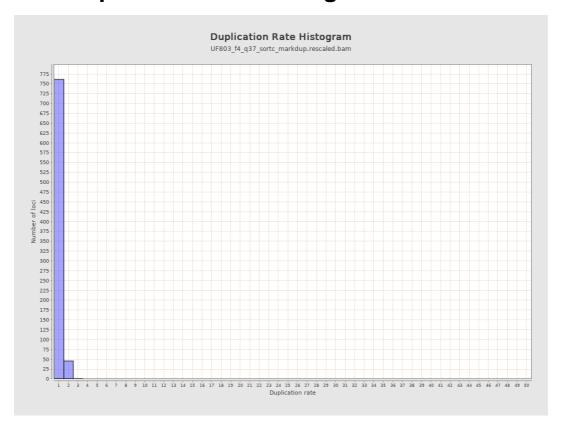


# 6. Results : Genome Fraction Coverage



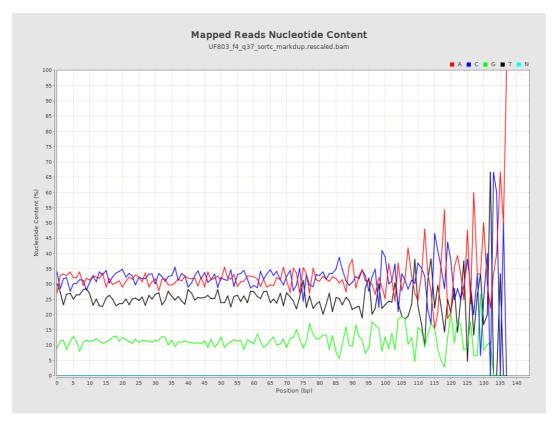


## 7. Results: Duplication Rate Histogram



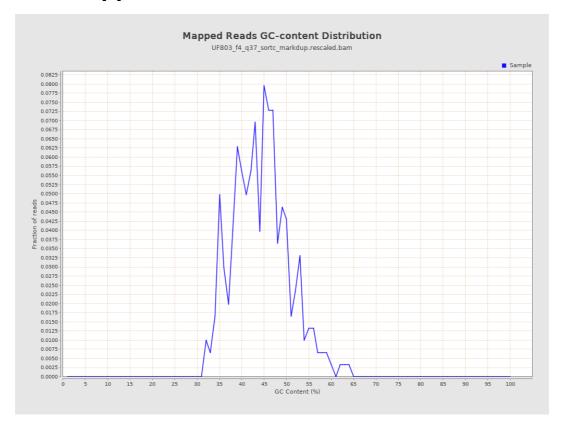


## 8. Results: Mapped Reads Nucleotide Content



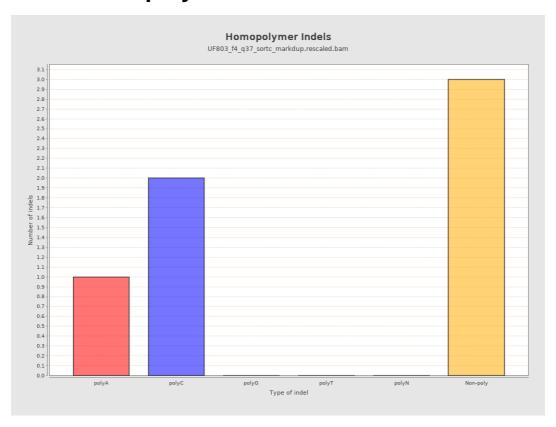


## 9. Results: Mapped Reads GC-content Distribution





## 10. Results : Homopolymer Indels





# 11. Results: Mapping Quality Across Reference





## 12. Results: Mapping Quality Histogram

