# Qualimap Analysis Results

BAM QC analysis Generated by Qualimap v.2.2.2-dev 2022/03/02 02:56:40



## 1. Input data & parameters

#### 1.1. QualiMap command line

qualimap bamqc -bam output/UF101/UF101\_f4\_q37\_sortc\_markdup.rescaled.bam -nw 400 -hm 3

#### 1.2. Alignment

Command line:	bwa samse -r @RG\tID:UF101\tSM:UF101\tLB:nan\ tPL:ILLUMINA /data/stonelab/references/Human_mit ochondrial/NC_012920.1.fasta output/UF101/UF101-ancient.sai output/UF101/UF101- ancient.trimmed.fq	
Draw chromosome limits:	no	
Analyze overlapping paired-end reads:	no	
Program:	bwa (0.7.17-r1188)	
Analysis date:	Wed Mar 02 02:56:40 MST 2022	
Size of a homopolymer:	3	
Skip duplicate alignments:	no	
Number of windows:	400	
BAM file:	output/UF101/UF101_f4_q37_sortc_ markdup.rescaled.bam	



## 2. Summary

#### 2.1. Globals

Reference size	16,569		
Number of reads	6,648		
Mapped reads	6,648 / 100%		
Unmapped reads	0 / 0%		
Mapped paired reads	0 / 0%		
Secondary alignments	0		
Read min/max/mean length	30 / 129 / 73.22		
Duplicated reads (estimated)	1,315 / 19.78%		
Duplication rate	20.4%		
Clipped reads	0 / 0%		

#### 2.2. ACGT Content

Number/percentage of A's	153,461 / 31.53%	
Number/percentage of C's	151,022 / 31.03%	
Number/percentage of T's	127,957 / 26.29%	
Number/percentage of G's	54,275 / 11.15%	
Number/percentage of N's	0 / 0%	
GC Percentage	42.18%	

#### 2.3. Coverage

Mean	29.3775
Standard Deviation	15.41



#### 2.4. Mapping Quality

Mean Mapping Quality	36.35
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#### 2.5. Mismatches and indels

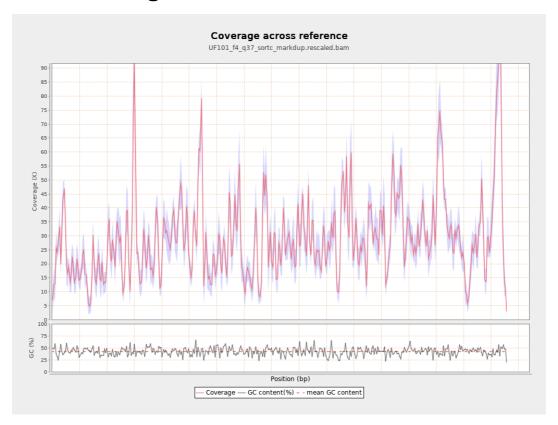
General error rate	2.15%
Mismatches	10,461
Insertions	23
Mapped reads with at least one	0.3%
insertion	
Deletions	37
Mapped reads with at least one	0.56%
deletion	
Homopolymer indels	38.33%

#### 2.6. Chromosome stats

Name	Length	Mapped bases		Standard deviation
NC_012920.1	16569	486756	29.3775	15.41

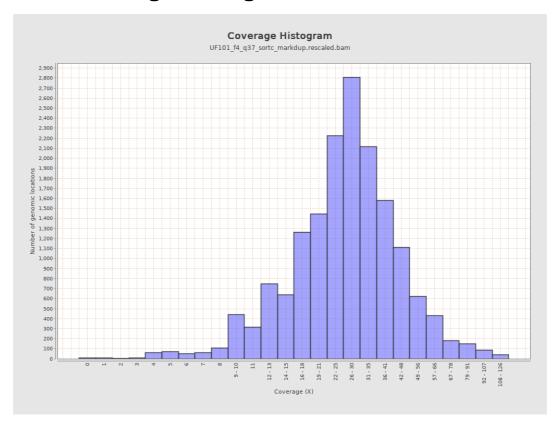


## 3. Results: Coverage across reference



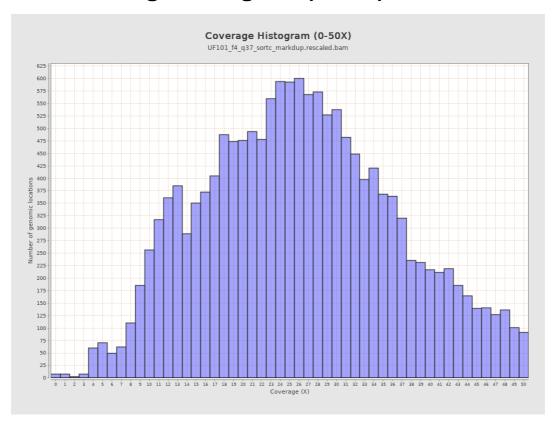


## 4. Results : Coverage Histogram



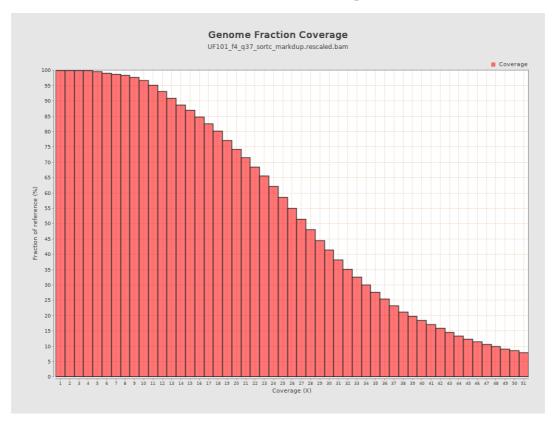


## 5. Results: Coverage Histogram (0-50X)



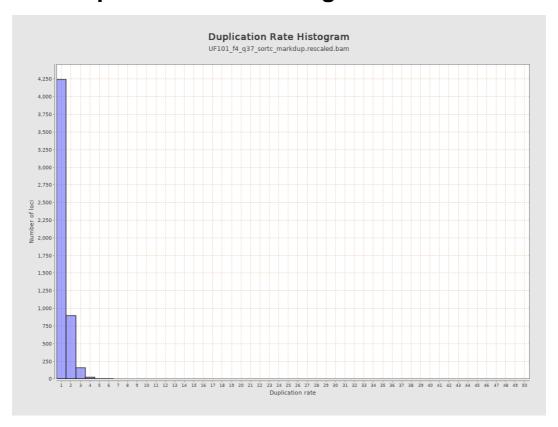


## 6. Results : Genome Fraction Coverage



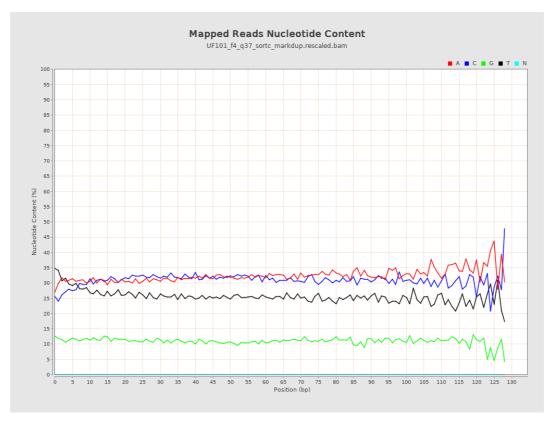


## 7. Results: Duplication Rate Histogram



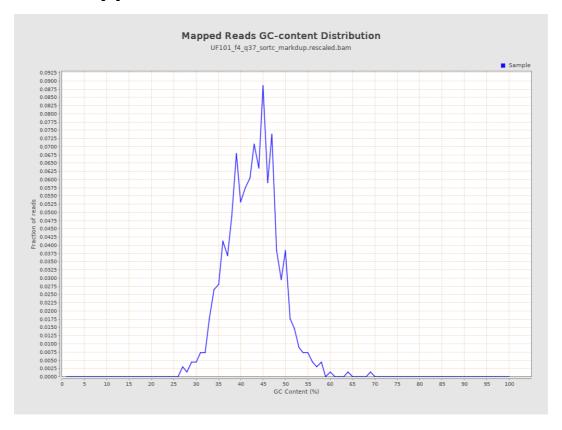


## 8. Results: Mapped Reads Nucleotide Content



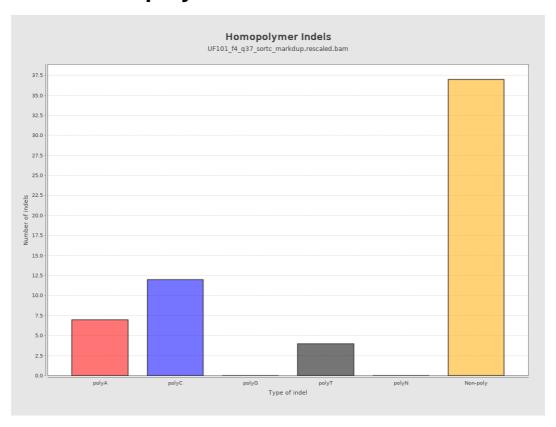


## 9. Results: Mapped Reads GC-content Distribution



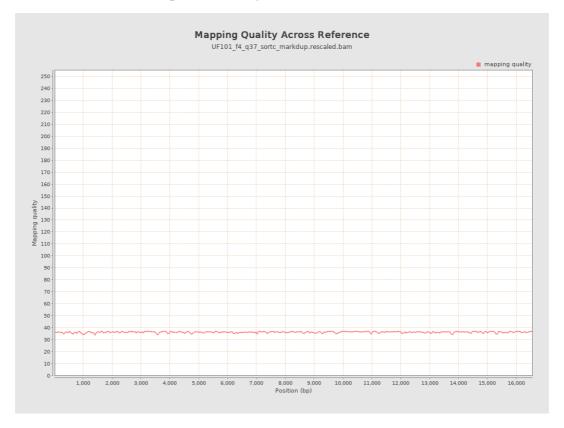


# 10. Results : Homopolymer Indels





## 11. Results: Mapping Quality Across Reference





# 12. Results: Mapping Quality Histogram

