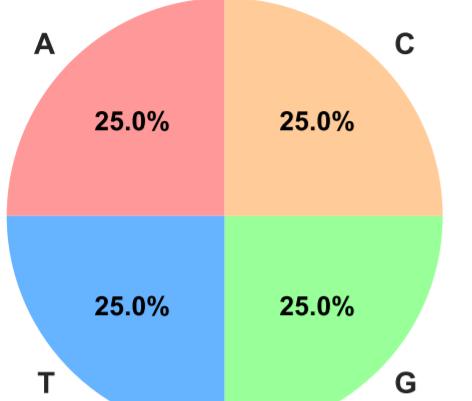
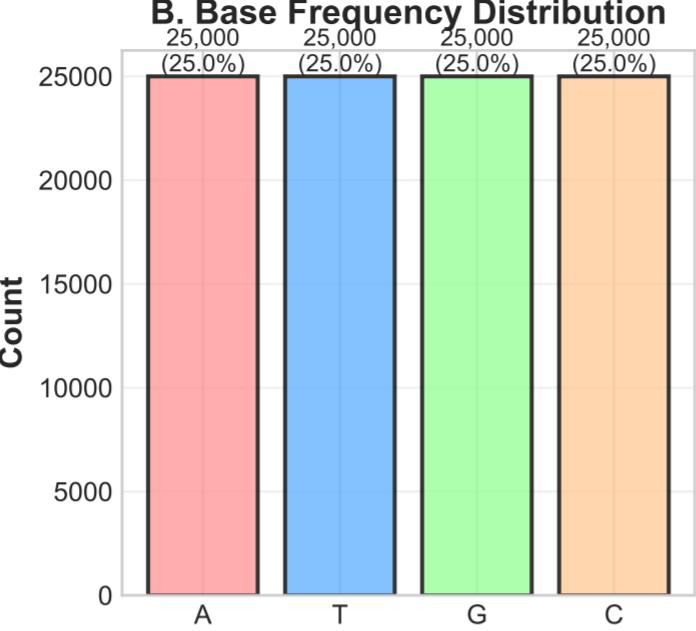


Genome Parser Results: Sequence Composition and Base Distribution Analysis

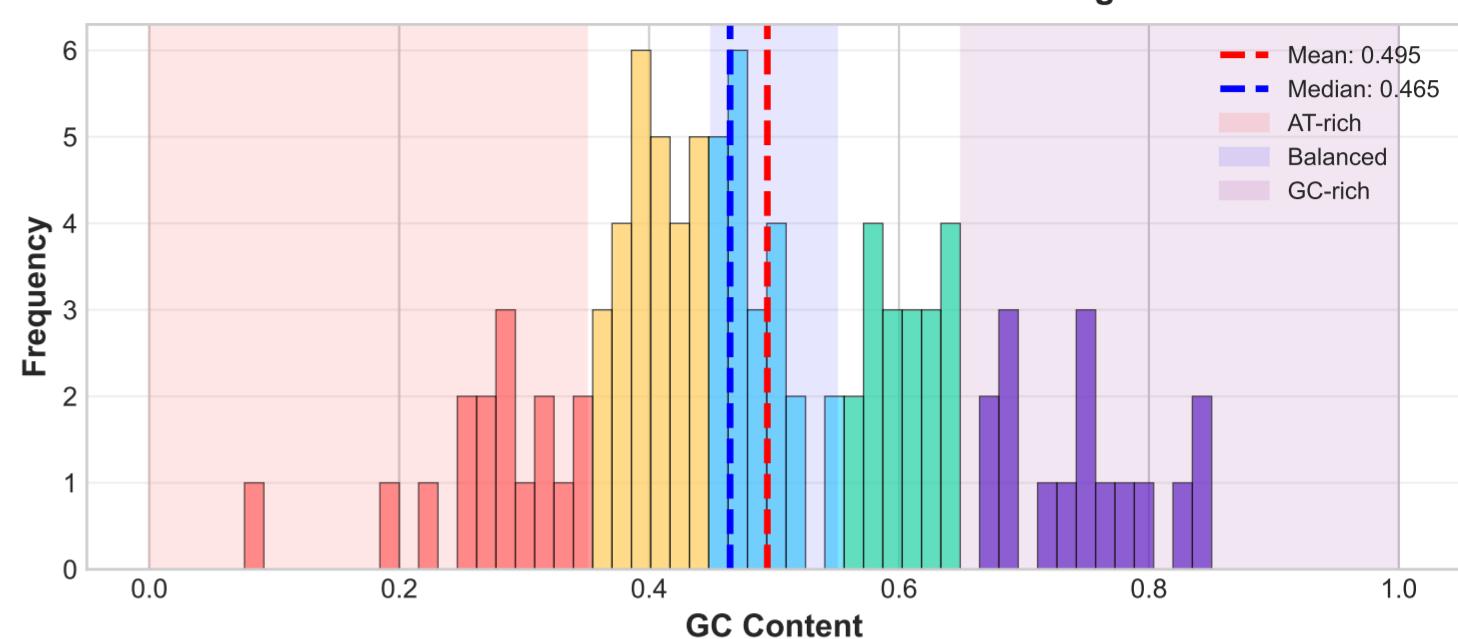
A. Overall Base Composition



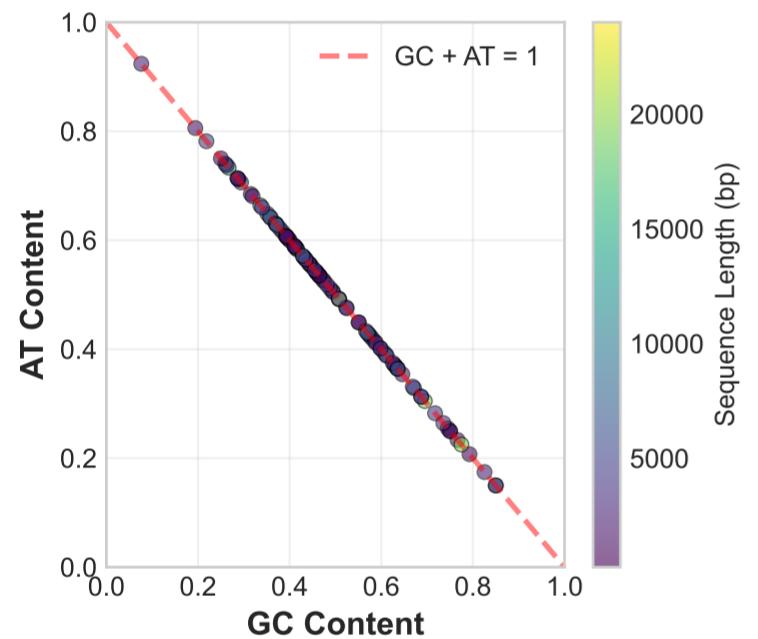
B. Base Frequency Distribution



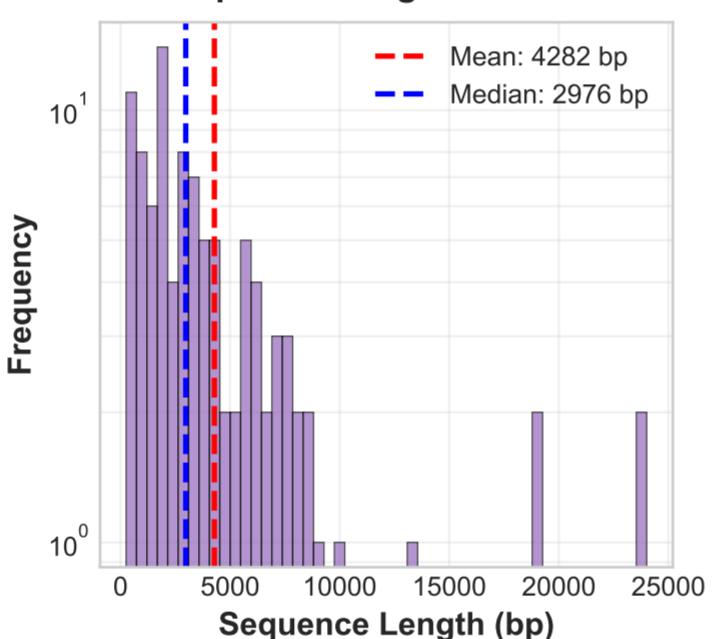
C. GC Content Distribution with Genomic Regions



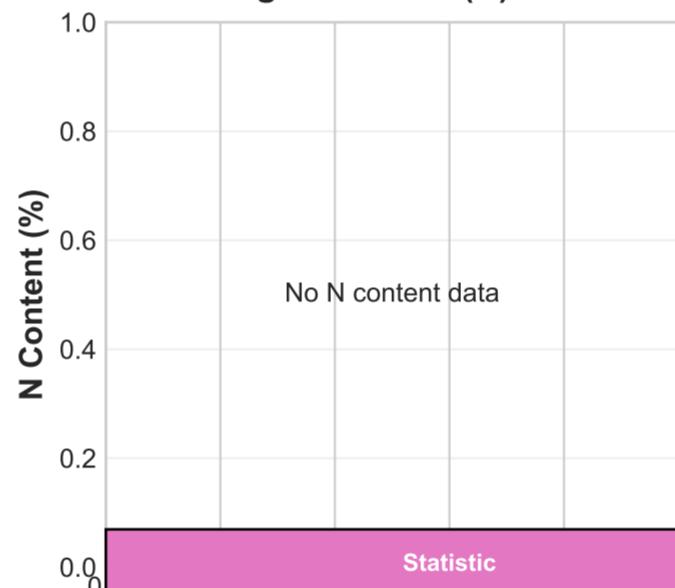
D. GC vs AT Content Correlation



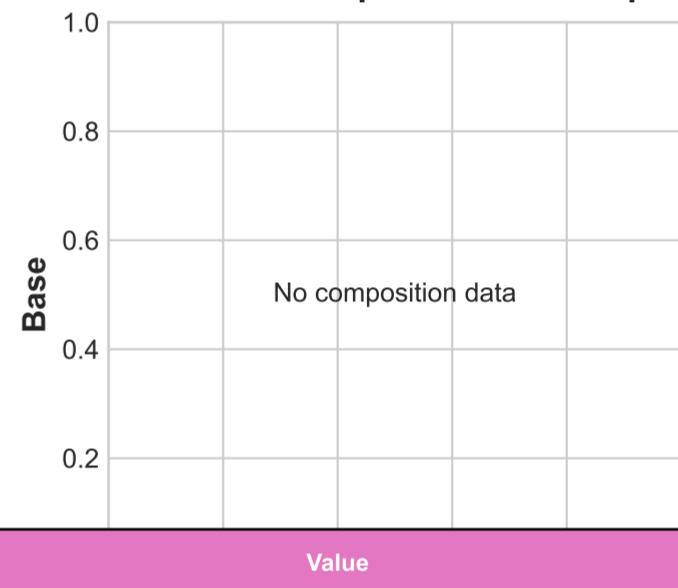
E. Sequence Length Distribution



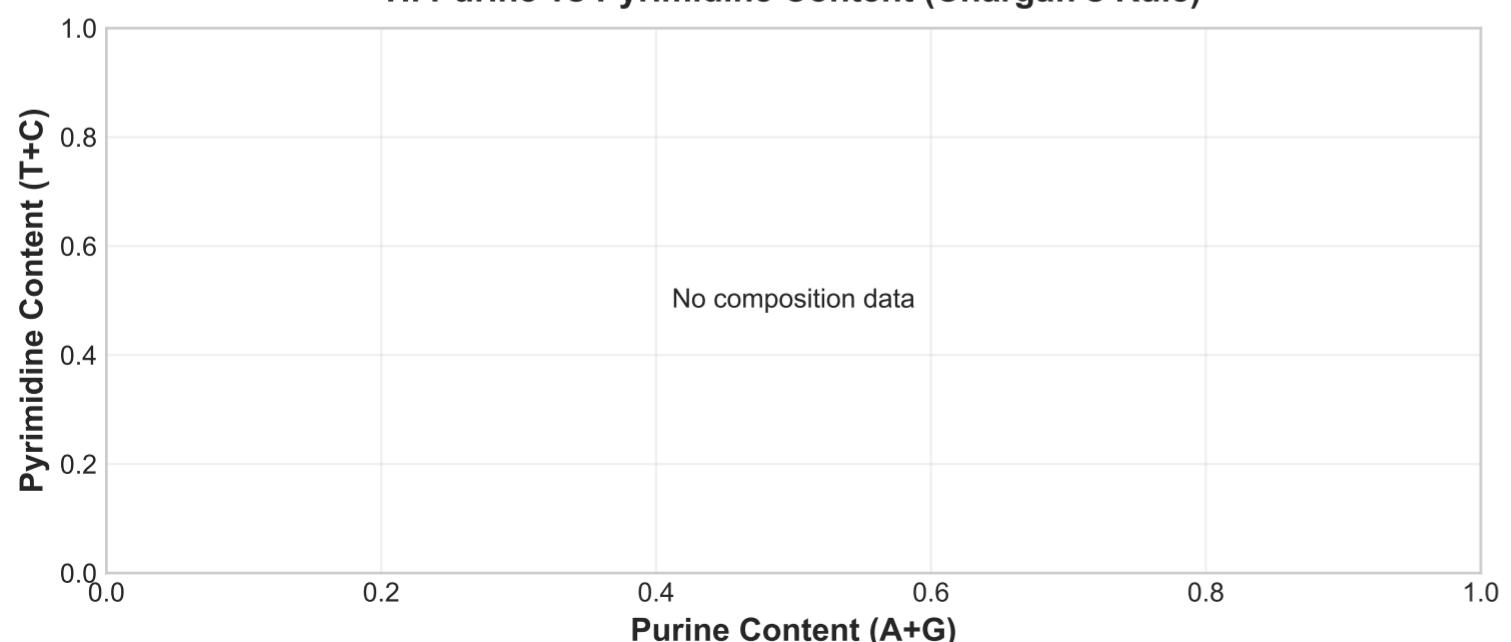
F. Ambiguous Base (N) Content



G. Base Composition Heatmap



H. Purine vs Pyrimidine Content (Chargaff's Rule)



I. Comprehensive Genome Statistics

Statistic	Value
Total Sequences	3
Total Bases	100,100
A Count	25,000 (24.98%)
T Count	25,000 (24.98%)
G Count	25,000 (24.98%)
C Count	25,000 (24.98%)
N Count	100 (0.10%)
Mean GC Content	0.4946
Std GC Content	0.1564
Mean Seq Length	4282 bp
Median Seq Length	2976 bp
Total Genome Size	428,211 bp
A/T Ratio	1.0000
G/C Ratio	1.0000