



# The Missing Tailed Phages: Prediction of Small Capsid Candidates

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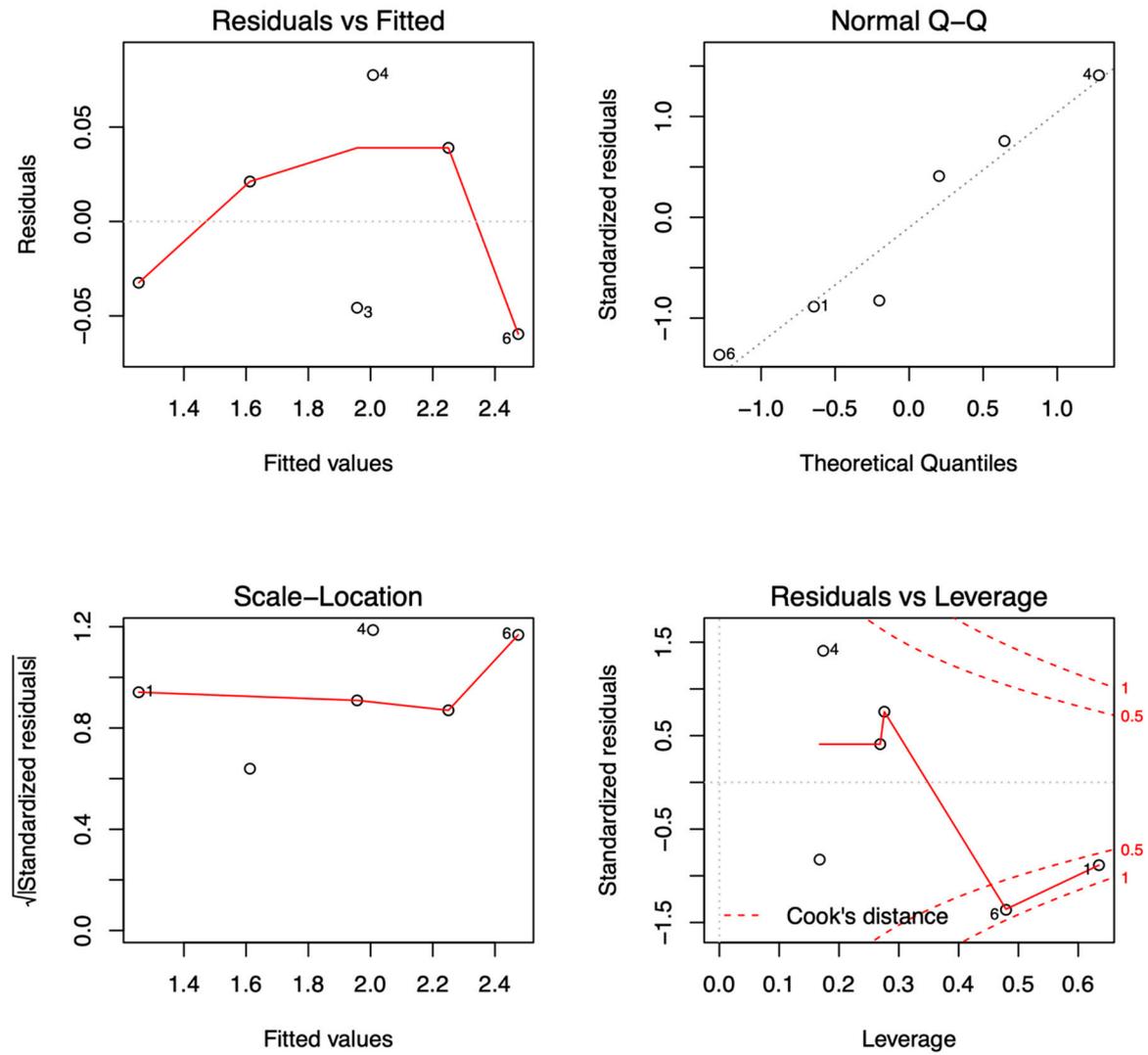
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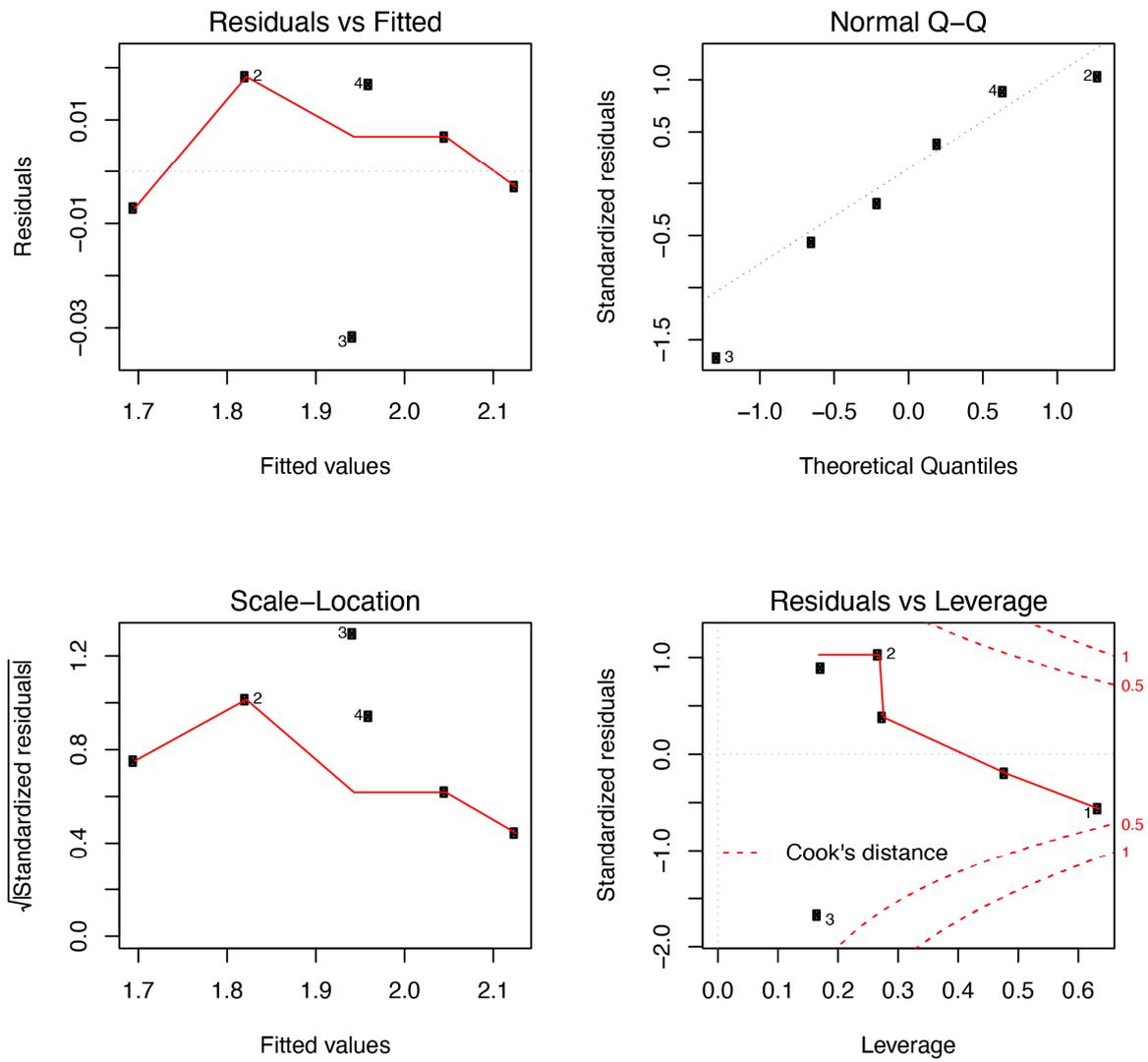
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## Supplementary Figures and Tables



**Figure S1.** Residual diagnostics for the genome length model.



**Figure S2.** Residual diagnostics for the capsid diameter model.

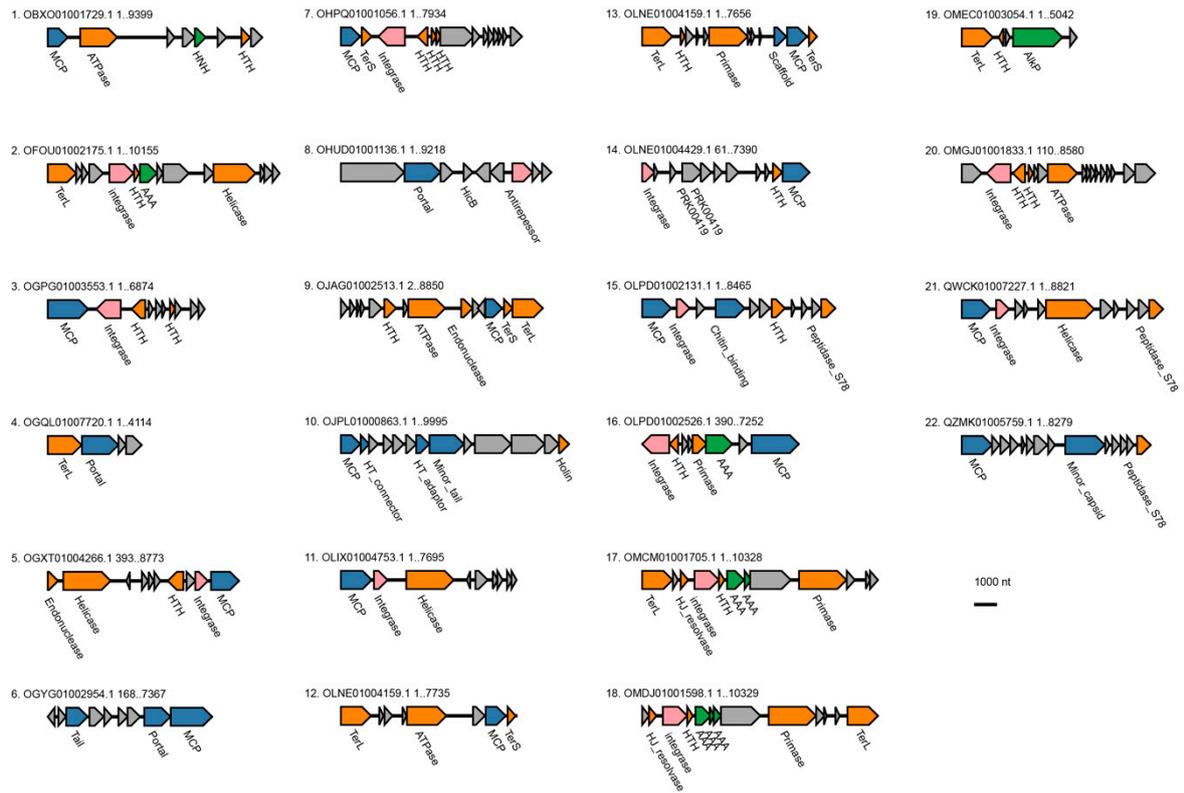


Figure S3. Annotated metagenome-assembled tailed phage genomes for predicted  $T \leq 3$  capsid architectures.

Property	rho	p-value
Interior volume	0.924	$4.09 \cdot 10^{-6}$ ***
Interior surface	0.923	$4.08 \cdot 10^{-6}$ ***
Exterior surface	0.989	$2.84 \cdot 10^{-6}$ ***
Genome size	0.817	$3.37 \cdot 10^{-6}$ ***
Capsids thickness	0.663	0.0010 **
Interior sphericity	-0.566	0.0069 **
Exterior sphericity	-0.684	0.0006 ***
Genome density	-0.162	0.4695
MCP interior area <sup>§</sup>	0.484	0.0242 *
MCP exterior area <sup>§</sup>	0.380	0.0819

**Table S1.** Correlation analysis with capsid size. Spearman's correlation coefficient (rho) for structural properties as a function of the external capsid diameter. The stars in the p-value are associated to standard cut-offs for statistical significance: (\*)  $p < 0.05$ , (\*\*)  $p < 0.01$ , and (\*\*\*)  $p < 0.001$ .