

Supplementary Figure S3. Clustering benchmarks on two CAMI I datasets. The number of identified bins on CAMI I (*A*) Medium and (*B*) High Complexity dataset with different score levels were shown. All programs were run in multi-sample mode with their default parameters except for MaxBin2 on the CAMI I High Complexity dataset. MaxBin2 was run on a single merged dataset duo to the excessive runtime with multiple samples. MetaDecoder with minimum sequence length setting to 1 Kb (MetaDecoder1000) was also added for benchmarking. Assessments were evaluated using AMBER (version 2.0.2).