

Review of: "Functional and evolutionary significance of unknown genes from uncultivated taxa"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

In the presented manuscript, Rodríguez del Río and co-workers analyzed the Functional and evolutionary significance of unknown genes from uncultivated taxa.

The manuscript is suitable for publication, but the language should be revised and additional analyses should be performed to present a comprehensive analysis as proposed by the authors.

I provide some major comments below.

Major;

1. The authors use a variety of completeness and redundancy for the genomes used ($\geq 50\%$ complete, $\leq 5\%$ contamination; $\geq 90\%$ complete, $\leq 5\%$ contamination; $\geq 50\%$ complete, $< 10\%$ contamination; $\geq 50\%$ complete, $< 5\%$ contamination), however, the authors must use the same completeness and redundancy values for the results to be comparable.
2. The authors could use an additional bioinformatics tool to corroborate the data obtained with prokka.
3. The common phylogenetic marker 16S rRNA gene sequence identity is not used at all to infer phylogeny.