

Species *Planktophila rimovensis*

Etymology

[ri.mo.ven'sis] **N.L. fem. adj.** *rimovensis*, of Rimov, pertaining to the Římov Reservoir, Czech Republic, the isolation source of the species

Nomenclatural type

[Genome sc|0004109](#) ^{Is}

Description

Etymology. It is named 'rimovensis' after the isolation source, the eutrophic Římov Reservoir, Czech Republic.

Brief description. *Planktophila rimovensis* MRE-182 (ENA accession number GCA_965267985) was isolated from the epilimnion (0.5m depth) of Římov Reservoir, Czech Republic (date: 2021-11-01) and it is the only isolated representative of the species. It has one circular genome with a size of 1,488,100 bp, a GC content of 48.8%, and a coding density of 95.67%. It encodes one rRNA operon and 37 tRNA genes. It encodes genes for actinorhodopsin and heliorhodopsin but is unable to synthesize retinal *de novo* due to the absence of the *bhl* gene. Also, it is auxotrophic for asparagine. Recruitment analysis showed that it was a very rare organism, occurring only in autumn in the Římov Reservoir. The closest relative is *Planktophila jirickensis* JirE-27 with which it shares an average nucleotide identity of 87.25%. The Current GTDB classification (r220) is d__Bacteria; p__Actinomycetota; c__Actinomycetia; o__Nanopelagicales; f__Nanopelagicaceae; g__Planktophila; s__.

Classification

Bacteria » *Actinomycetota* » *Actinomycetes* » *Nanopelagicales* » *Nanopelagicaceae* » *Planktophila* » *Planktophila rimovensis*

References

Effective publication: Chiriatic et al., 2025 [1]

Registry URL

<https://seqco.de/i:51469>

References

1. Chiriatic et al. (2025). Ecological success in freshwater lakes: insights from novel cultivated lineages of the abundant Nanopelagicales order. *Microbiome*. DOI: [10.1186/s40168-025-02272-x](https://doi.org/10.1186/s40168-025-02272-x)