

## Species *Planktophila warneckeii*

### Etymology

[war.ne.cke'i] **N.L. masc. gen. n.** *warneckeii*, of Warnecke, named after the deceased German scientist Falk Warnecke, who intensively worked on the ecology of freshwater Planktophila

### Nomenclatural type

[NCBI Assembly: GCA\\_965234675.1](#) <sup>Ts</sup>

### Reference Strain

[Strain sc|0038946](#): RE-8

### Description

Type strain is *Planktophila warneckeii* RE-8 (GCA\_965234675.1), isolated from 0.5 m depth from the Římov reservoir, Czechia (date: 2019-04-23), *via* high-throughput dilution to extinction cultivation. RE-8 has a genome size of 1.4 Mbp with a genomic GC content of 46.2%, contains 3 rRNA genes and 38 tRNAs. The genome is complete, consisting of a circular chromosome. The genome contains genes encoding rhodopsins. No genes for flagella or pilus assembly and chemotaxis were annotated. Pathways for the biosynthesis of all amino acids except for histidine were predicted. Further, pathways for riboflavin, pyridoxal, coenzyme A, and menaquinone biosynthesis were identified. The closest cultivated relative is Actinobacteria bacterium IMCC26103 (GCA\_002284875.1), with an average amino acid identity of 72.2% and average nucleotide identity of 70.96%. Current GTDB classification (R220): d\_\_Bacteria; p\_\_Actinomycetota; c\_\_Actinomycetia; o\_\_Nanopelagicales; f\_\_Nanopelagicaceae; g\_\_Planktophila; s\_\_.

### Classification

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

### References

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

### Registry URL

<https://seqco.de/i:48741>

## References

1. Salcher et al. (2025). Bringing the uncultivated microbial majority of freshwater ecosystems into culture. *Nature Communications*. [DOI:10.1038/s41467-025-63266-9](https://doi.org/10.1038/s41467-025-63266-9)