

Species *Planktophila grossartii*

Etymology

[gros.sar.ti'i] **N.L. masc. gen. n.** *grossartii*, named after the German scientist Hans-Peter Grossart, who greatly contributed to the ecological characterization of freshwater Actinomycetota.

Nomenclatural type

[NCBI Assembly: GCA_965234365.1](#) ^{Ts}

Reference Strain

[Strain sc|0038786](#): RE-3

Description

Type species is *Planktophila grossartii* RE-3 (GCA_965234365.1), isolated from 0.5 m depth from the Římov reservoir, Czechia (date: 2019-04-23), *via* high-throughput dilution to extinction cultivation. RE-3 has a genome size of 1.4 Mbp with a genomic GC content of 48.8 %, 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 taurine degradation and the biosynthesis of all amino acids except for histidine were predicted. Further, pathways for riboflavin, pyridoxal, coenzyme A, NAD, and menaquinone biosynthesis were identified. The closest cultivated relative is Actinobacteria bacterium IMCC25003 (GCA_002284855.1) with an average nucleotide identity of 90.33%. Current GTDB classification (R220): d__Bacteria; p__Actinomycetota; c__Actinomycetia; o__Nanopelagiales; f__Nanopelagicaceae; g__Planktophila; s__Planktophila sp009701085.

Classification

Bacteria » *Actinomycetota* » *Actinomycetes* » *Nanopelagiales* » *Nanopelagicaceae* » *Planktophila* » *Planktophila grossartii*

References

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

Registry URL

<https://seqco.de/i:49103>

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)