

Species *Planktophila vulgaris*

Etymology

[vul.ga'ris] **L. fem. adj.** *vulgaris*, common, referring to the occurrence of this species in a wide range of water environments and in high abundance

Nomenclatural type

[Genome sc|0004101](#) ^{Is}

Description

Etymology. It is named 'ubiquitis' after the occurrence of this species in a wide range of water environments and in high abundance.

Brief description. *Planktophila ubiquitis* MKE-26 (ENA accession number GCA_965267815) was isolated from the epilimnion (0.5m depth) of Klíčava Reservoir, Czech Republic (date: 2021-04-08) and it is the representative genome for the species. Strain MKE-27 (GCA_965267675) belongs to the same species and was isolated from the same place, and on the same date; these two strains share an average nucleotide identity of 96.11%. *P. ubiquitis* MKE-26 has a complete, circular genome with a size of 1,335,437 bp, a GC content of 46.8%, and a coding density of 95.76%. It encodes one rRNA operon and 38 tRNAs. The oxidative part of the pentose phosphate pathway is missing. The two strains differ in their ability to synthesize amino acids; the MKE-27 strain can synthesize all of them, while MKE-26 is auxotrophic for asparagine. The closest cultivated relative of this species is *Planktophila landstejnensis* Bala-34 with whom it shares an average nucleotide identity of 93.23%. The species is found in high abundance all over the world and in different water bodies, such as Torrens River (Australia), Delaware River and Bay (USA), Lake Tiefwaren (Germany), Lake Ikeda (Japan), Lake Michigan (USA), Římov and Klíčava Reservoirs (Czech Republic), and boreal lakes in Canada. 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 vulgaris*

References

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

Registry URL

<https://seqco.de/i:51468>

References

1. Chiriac 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)