

Species *Planktophila turicensis*

Etymology

[tu.ri.cen'sis] **N.L. neut. n.** *Turicum*, the Latin name of Zurich; **N.L. fem. adj.** *turicensis*, referring to Turicum, the latin name of Zurich, pertaining to Lake Zurich, the isolation source of the type strain

Nomenclatural type

[NCBI Assembly: GCA_965234405.1](#) ^{Ts}

Reference Strain

[Strain sc|0038793](#): ZE-9

Description

Type species is *Planktophila turicensis* ZE-9 (GCA_965234405.1), isolated from 5 m depth from Lake Zurich, Switzerland (date: 2019-11-13), *via* high-throughput dilution to extinction cultivation. ZE-9 has a genome size of 1.4 Mbp with a genomic GC content of 48.5%, contains 3 rRNA genes and 39 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 '*Candidatus Planktophila sulfonica*' MMS-IA-56 (GCF_002288185.1), with an average nucleotide identity of 94.22%. 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 turicensis*

References

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

Registry URL

<https://seqco.de/i:49118>

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)