

Species *Limnohabitans rimovensis*

Etymology

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

Nomenclatural type

[NCBI Assembly: GCA_965234775.1](#) ^{Ts}

Reference Strain

[Strain sc|0038964](#): RE-1

Description

Type strain is *Limnohabitans rimovensis* RE-1 (GCA_965234775.1), isolated from 0.5 m depth from the Římov Reservoir, Czechia (date: 2019-04-23), *via* high-throughput dilution to extinction cultivation. RE-1 has a genome size of 3.5 Mbp with a genomic GC content of 58.7%, contains 3 rRNA genes and 43 tRNAs. The genome is a high-quality draft consisting of 12 contigs. The genome contains genes encoding anoxygenic aerobic phototrophy (*pufABLM*). Genes for flagellar and pilus assembly were annotated. Pathways for urea degradation, thiosulfate oxidation (Sox pathway), methane/alkanesulfonate and glycolate oxidation, benzoate, salicylate, and phthalate degradation, and the biosynthesis of all amino acids except for aspartate were predicted. Further, pathways for thiamine, riboflavin, pantothenate, coenzyme A, THF, and heme biosynthesis were identified. The closest cultivated relative is *Limnohabitans* sp. JirII-31 (GCF_002778315.1), with an average amino acid identity of 65.1% and average nucleotide identity of 72.4%. Current GTDB classification (R220): d__Bacteria; p__Pseudomonadota; c__Gammaproteobacteria; o__Burkholderiales; f__Burkholderiaceae_B; g__Limnohabitans; s__.

Classification

Bacteria » *Pseudomonadota* » *Betaproteobacteria* » *Burkholderiales* » *Comamonadaceae* » *Limnohabitans* » *Limnohabitans rimovensis*

References

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

Registry URL

<https://seqco.de/i:48738>

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)