

Register list for 7 new names including *Pseudoplanktomarina* gen. nov.

Submitted by Brinkhoff, Thorsten

Genus *Pseudoplanktomarina*

Etymology

[Pseu.do.plank.to.ma.ri'na] Gr. neut. adj. *pseudes*, false; N.L. fem. n. *Planktomarina*, a marine bacterial genus; N.L. fem. n. *Pseudoplanktomarina*, the false *Planktomarina*

Nomenclatural type

Species *Pseudoplanktomarina karensis*^{Ts}

Description

Members of *Candidatus Pseudoplanktomarina* genus are aerobic heterotrophic bacteria with an average genomes size 2.41 Mbp (raw: 2.17 Mbp) and a GC content of 0.43. Currently, there are three distinct species exhibiting different distribution patterns across the global ocean. All species in this group contain a proteorhodopsin gene, however, lack genes for sox and CODH clusters. Entner-Doudoroff and pentose phosphate pathways are two major pathways for glycolysis catabolism in *Candidatus Pseudoplanktomarina*. Additionally, genes involved in DMS_S and DHPS degradation are also present in this genus. The type species of the genus *Pseudoplanktomarina* is *Pseudoplanktomarina karensis*.

Classification

Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Rhodobacterales* » *Paracoccaceae* » *Pseudoplanktomarina*

References

Effective publication: Liu et al., 2023 [1]

Registry URL

<https://seqco.de/i:24061>

Species *Pseudoplanktomarina karensis*^{Ts}

Etymology

[kar.en'sis] N.L. fem. adj. *karensis*, pertaining to the Kara Sea, corresponding to the origin from where the genome was recovered (Kara Sea)

Nomenclatural type

[NCBI Assembly: GCA_951541495.1](#)^{Ts}

Description

The type material, GCA_951541495.1 (MAG B2-20), is a metagenome-assembled genome from a sample taken at the epipelagic zone in the Kara Sea, Arctic Ocean (Biosample accession: SAMEA4397239). The assembly genome is of high quality with 95.6 % completeness with 0.02 % contamination and the genome contains 16 tRNA genes. The genome size is 2.28 (raw: 2.18) with a GC content of 0.44. *Pseudoplanktomarina karensis* is the type species of the new genus *Pseudoplanktomarina*.

Classification

Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Rhodobacterales* » *Paracoccaceae* » *Pseudoplanktomarina* » *Pseudoplanktomarina karensis*^{Ts}

References

Effective publication: Liu et al., 2023 [1]

Registry URL

<https://seqco.de/i:24063>

Species *Planktomarina antarctica*

Etymology

[ant.arc'ti.ca] L. fem. adj. *antarctica*, of the Antarctic, corresponding to the origin from where the genome was recovered (Antarctic ocean)

Nomenclatural type

[NCBI Assembly: GCA_029962705.1](#)^{TS}

Description

The type material, GCA_029962705.1 (MAG C5-3), is a metagenome-assembled genome from a sample taken at the epipelagic zone in the Southern Ocean in 2012 (Biosample accession: SAMEA5958381). The assembly genome is of high quality with 94.16% completeness and 1.77 % contamination and contains 16 tRNA genes. The genome size is 2.80 Mbp (raw: 2.68 Mbp) with a GC content of 0.48.

Classification

Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Rhodobacterales* » *Paracoccaceae* » *Planktomarina* » *Planktomarina antarctica*

References

Effective publication: Liu et al., 2023 [1]

Registry URL

<https://seqco.de/i:24060>

Species *Planktomarina arctica*

Etymology

[arc'ti.ca] L. fem. adj. *arctica*, northern, from the Arctic, corresponding to the origin from where the genome was recovered (Arctic ocean)

Nomenclatural type

[NCBI Assembly: GCA_951542345.1](#)^{TS}

Description

The type material, GCA_951542345.1 (MAG C4-4), is a metagenome-assembled genome from a sample taken at the epipelagic zone in the Arctic Ocean in 2013 (Biosample accession: SAMEA4397426). The completeness and contamination of the assembly are 93.42% and 0.41%, respectively. Genome assembly contains 14 tRNA genes. The genome size is 2.64 (raw: 2.47 Mbp) with a GC content of 0.48.

Classification

Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Rhodobacterales* » *Paracoccaceae* » *Planktomarina* » *Planktomarina arctica*

References

Effective publication: Liu et al., 2023 [1]

Registry URL

<https://seqco.de/i:24058>

Species *Planktomarina forsetii*

Etymology

[for.set'i.i] **N.L. gen. n.** *forsetii*, of Forseti, Scandinavian god of justice and reconciliation resident on Helgoland, from where the genome was recovered.

Nomenclatural type

[NCBI Assembly: GCA_951543265.1](#)^{TS}

Description

The type material, GCA_951543265.1 (MAG C3-11), is a metagenome-assembled genome derived from a water sample (Biosample: SAMEA5407188). The assembly is of high quality with a mean completeness of 96.74% and 0.1% contamination and contains 19 tRNAs. The genome size is 3.12 Mbp (raw: 3.02 Mbp) with a GC content of 0.51.

Classification

Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Rhodobacterales* » *Paracoccaceae* » *Planktomarina* » *Planktomarina forsetii*

References

Effective publication: Liu et al., 2023 [1]

Registry URL

<https://seqco.de/i:24046>

References

1. Liu et al. (2023). Metagenome-assembled genomes reveal greatly expanded taxonomic and functional diversification of the abundant marine Roseobacter RCA cluster. *Microbiome*. [DOI:10.1186/s40168-023-01644-5](https://doi.org/10.1186/s40168-023-01644-5)

Register List Certificate of Validation

On behalf of the *Committee on the Systematics of Prokaryotes Described from Sequence Data* (SeqCode Committee), we hereby certify that the Register List seqco.de/r:8lujptmc submitted by **Brinkhoff, Thorsten** and including 5 new names has been successfully validated.

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