

Register list for 5 new names including *Chordibacter* gen. nov.

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Family *Seribacteraceae*

Etymology

[Se.ri.bac.te.ra'ce.æ] **N.L. masc. n.** *Seribacter*, referring to the type genus *Seribacter*; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Seribacteraceae*, the *Seribacter* family

Nomenclatural type

Genus *Seribacter*

Description

Members of the family *Seribacteraceae* are predicted to be aerobic and heterotrophic marine bacteria dwelling in surface waters. A total of 71 MAGs belonging to this family were recovered in the 2010, 2011, 2012, 2016, 2018 and 2020 Helgoland spring blooms which fell into 6 clusters. *Seribacteraceae* belongs to the order *Opitutales*, class *Verrucomicrobiae*, and phylum *Verrucomicrobiota* (based on GTDB taxonomy). Formerly identified as family MB11C04. Two FISH probes for members of this family have been developed (probe c17-1166 and c21-472 from [Orellana et al., 2022](#)) and previously used to describe that members of this genus are short rods ([Orellana et al., 2022](#)). The type genus is *Seribacter* and the corresponding type material is the metagenome-assembled genome r4, which shows 99.5% ANI to a previously described representative of the MB11C04 family (MB5 from [Orellana et al., 2022](#)).

Classification

Bacteria » *Verrucomicrobiota* » *Opitulia* » *Opitutales* » *Seribacteraceae*

References

Effective publication: Wilkie, Orellana, 2025 [1]

Registry URL

<https://seqco.de/i:44057>

Genus *Chordibacter*

Etymology

[Chor.di.bac'ter] **L. masc. adj.** *chordus*, late-born; **N.L. masc. n.** *bacter*, rod; **N.L. masc. n.** *Chordibacter*, late blooming rod-shaped bacteria

Nomenclatural type

Species *Chordibacter forsetii*^{TS}

Description

Members of the *Chordibacter* genus are predicted to be aerobic and heterotrophic marine bacteria dwelling in surface waters. A total of 17 MAGs belonging to this genus were recovered in the 2011, 2012, 2016, and 2018 Helgoland spring blooms. *Chordibacter* belongs to the family *Seribacteraceae*, formerly known as MB11C04, order *Opitutales*, class *Verrucomicrobiae*, and phylum *Verrucomicrobiota*. Formerly identified as genus MB11C04. A FISH probe for this family has been developed (probe c17-1166 from [Orellana et al., 2022](#)) and previously used to describe that members of this genus are short rods of length and width 0.9 and 0.8 µm respectively ([Orellana et al., 2022](#)).

Classification

Bacteria » *Verrucomicrobiota* » *Opitulia* » *Opitutales* » *Seribacteraceae* » *Chordibacter*

References

Effective publication: Wilkie, Orellana, 2025 [1]

Registry URL

<https://seqco.de/i:44038>

Genus *Seribacter*

Etymology

[Se.ri.bac'ter] **L. masc. adj.** *serus*, late; **N.L. masc. n.** *bacter*, rod; **N.L. masc. n.** *Seribacter*, late blooming rod-shaped bacteria

Nomenclatural type

Species *Seribacter sulfatis*^{Ts}

Description

Members of the *Seribacter* genus are predicted to be aerobic and heterotrophic marine bacteria dwelling in surface waters. A total of 45 MAGs belonging to this genus were recovered in the 2010, 2011, 2012, 2016, 2018 and 2020 Helgoland spring blooms. *Seribacter* belongs to the family *Seribacteraceae* fam. nov., order *Opitutales*, class *Verrucomicrobiae*, and phylum *Verrucomicrobiota*. Formerly identified as genus MB11C04 in family MB11C04. A FISH probe for this family has been developed (probe c21-472 from Orellana *et al.* 2022) and previously used to describe that members of the this genus are short rods of length and width 1.2 and 1.0 µm respectively (Orellana *et al.* 2022).

Orellana, L.H., Francis, T.B., Ferraro, M., Hehemann, J.-H., Fuchs, B.M., Amann, R.I. (2022) *Verrucomicrobiota* are specialist consumers of sulfated methyl pentoses during diatom blooms. ISME J, 630–41, Doi: 10.1038/s41396-021-01105-7.

Classification

Bacteria » *Verrucomicrobiota* » *Opitutia* » *Opitutales* » *Seribacteraceae* » *Seribacter*

References

Effective publication: Wilkie, Orellana, 2025 [1]

Registry URL

<https://seqco.de/i:44039>

Species *Chordibacter forsetii*^{Ts}

Etymology

[for.se.ti'i] **N.L. gen. masc. n.** *forsetii*, of Forseti, the Scandinavian god of justice and reconciliation resident on Helgoland

Nomenclatural type

[NCBI Assembly: GCA_964187505.1](#)^{Ts}

Description

Members of the *Chordibacter* genus are predicted to be aerobic and heterotrophic marine bacteria dwelling in surface waters. A total of 17 MAGs belonging to this genus were recovered in the 2011, 2012, 2016, and 2018 Helgoland spring blooms. This genome is estimated to be 92.7% complete with 2.2% redundancy. It has a GC content of 44.3% and a genome size of 2.12 Mbp. The 5S, 16S, and 23S rRNA genes were identified in the genome. *Chordibacter forsetii* belongs to the family MB11C04, order *Opitutales*, class *Verrucomicrobiae*, and phylum *Verrucomicrobiota*. Formerly identified as genus MB11C04 and species MB11C04. A FISH probe for this family has been developed (probe c17-1166 from [Orellana et al., 2022](#)) and previously used to describe that members of this genus are short rods of length and width 0.9 and 0.8 µm respectively ([Orellana et al., 2022](#)). The type species is *Chordibacter forsetii* and the corresponding type material is the metagenome-assembled genome ERZ814923, which shows 99.3% ANI to a previously described representative of the MB11C04 family (MB1 from [Orellana et al., 2022](#)).

Classification

Bacteria » *Verrucomicrobiota* » *Opitutia* » *Opitutales* » *Seribacteraceae* » *Chordibacter* » *Chordibacter forsetii*^{Ts}

References

Effective publication: Wilkie, Orellana, 2025 [1]

Registry URL

<https://seqco.de/i:44036>

Species *Seribacter sulfatis*^{Ts}

Etymology

[sul.fa'tis] **N.L. gen. n.** *sulfatis*, of sulfate, referring to the Marine Verrucomicrobiota encoding many sulfatases

Nomenclatural type

[NCBI Assembly: GCA_964187635.1](#)^{Ts}

Description

Members of the *Seribacter* genus are predicted to be aerobic and heterotrophic marine bacteria dwelling in surface waters. A total of 45 MAGs belonging to this genus were recovered in the 2010, 2011, 2012, 2016, 2018 and 2020 Helgoland spring blooms. This genome is estimated to be 94.2% complete with 0% redundancy. It has a GC content of 42.6% and a genome size of 2.53 Mbp. The 5S, 16S, and 23S rRNA genes were identified in the genome (Table S8).

Seribacter sulfatis belongs to the family *Seribacteraceae* fam. nov., order *Opitutales*, class *Verrucomicrobiae*, and phylum *Verrucomicrobiota*. Formerly identified as genus MB11C04 and species MB11C04, in the family MB11C04. A FISH probe for this family has been developed (probe c21-472 from [Orellana et al., 2022](#)) and previously used to describe that members of this genus are short rods of length and width 1.2 and 1.0 µm respectively ([Orellana et al., 2022](#)). The type species is *Seribacter sulfatis* and the corresponding type material is the metagenome-assembled genome ERZ816379, which shows 99.5% ANI to a previously described representative of the MB11C04 family (MB5 from [Orellana et al., 2022](#)).

Classification

Bacteria » *Verrucomicrobiota* » *Opitutia* » *Opitutales* » *Seribacteraceae* » *Seribacter* » *Seribacter sulfatis*^{Ts}

References

Effective publication: Wilkie, Orellana, 2025 [1]

Registry URL

<https://seqco.de/i:44037>

References

1. Wilkie, Orellana (2025). Elusive marine Verrucomicrobiota: Seasonally abundant members of the novel genera *Seribacter* and *Chordibacter* specialize in degrading sulfated glycans. *Systematic and Applied Microbiology*. DOI:10.1016/j.syapm.2024.126562

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:vjimgryf** submitted by **Wilkie, Isabella Maria** and including 5 new names has been successfully validated.

Date of Priority: 2025-08-04 08:20 UTC
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