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

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Table 1: Complete list of names proposed in the current register list.

Proposed Taxon	Etymology	Description	Parent Taxon	Туре	Registry URL
Family Seribacteraceae	[Se.ri.bac.te.ra'ce.ae] 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	Members of the family <i>Seribacteraceae</i> 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. <i>Seribacteraceae</i> belongs to the order <i>Opitutales</i> , class <i>Verrucomicrobiae</i> , and phylum <i>Verrucomicrobiota</i> (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 <u>Orellana et al.</u> , 2022) and previously used to describe that members of this genus are short rods (<u>Orellana et al.</u> , 2022). The type genus is <i>Seribacter</i> 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 <u>Orellana et al.</u> , 2022).	Opitutales	Seribacter	seqco.de/i:44057
Genus Chordibacter	[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	Members of the <i>Chordibacter</i> 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. <i>Chordibacter</i> belongs to the family <i>Seribacteraceae</i> , formerly known as MB11C04, order <i>Opitutales</i> , class <i>Verrucomicrobiae</i> , and phylum <i>Verrucomicrobiota</i> . Formerly identified as genus MB11C04. A FISH probe for this family has been developed (probe c17-1166 from <u>Orellana <i>et al.</i></u> , 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 (<u>Orellana <i>et al.</i></u> , 2022).	Seribacteraceae	Chordibacter forsetil ^{Ts}	seqco.de/i:44038
		Members of the <i>Seribacter</i> genus are predicted to be			

Proposed Taxon	Etymology	aerobic and heterotrophic marine bacteria dwelling in surface waters. A tot Description belonging to this genus were recovered in the 2010, 2011, 2012, 2016,	Parent Taxon	Туре	Registry URL
Genus Seribacter	[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	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).	Seribacteraceae	Seribacter sulfatis ^{Ts}	seqco.de/i:44039
		Orellana, L.H., Francis, T.B., Ferraro, M., Hehemann, JH., 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.			
Species Chordibacter forsetil ^{Ts}	[for.se.ti'i] N.L. gen. masc. n. forsetii, of Forseti, the Scandinavian god of justice and reconciliation resident on Helgoland	Members of the <i>Chordibacter</i> 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. <i>Chordibacter forsetii</i> belongs to the family MB11C04, order <i>Opitutales</i> , class <i>Verrucomicrobiae</i> , and phylum <i>Verrucomicrobiota</i> . 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 <i>Chordibacter forsetii</i> 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).	Chordibacter	NCBI Assembly: GCA_964187505.1	seqco.de/i:44036
		Members of the <i>Seribacter</i> genus are predicted to be aerobic and heterotrophic marine bacteria dwelling in surface waters. A total of 45 MAGs belonging to this			

Proposed Taxon	Etymology	genus were recovered in the 2010, 2011, 2012, 2016, 2018 and 2020 Helg Description blooms. This genome is estimated to be 94.2% complete with 0%	Parent Taxon	Туре	Registry URL
Species Seribacter sulfatis ^{Ts}	[sul.fa'tis] N.L. gen. n. <i>sulfatis</i> , of sulfate, referring to the Marine Verrucomicrobiota encoding many sulfatases	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 metagenomeassembled genome ERZ816379, which shows 99.5% ANI to a previously described representative of the MB11C04 family (MB5 from Orellana et al., 2022).	Seribacter	NCBI Assembly: GCA_964187635.1 Ts	seqco.de/i:44037