Register list for 8 new names associated with endosymbionts of a magnetotactic ciliate

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Abstract

Proposed names are assigned to three of the four endosymbionts of a magnetotactic ciliate. Their genomes were sequenced following whole-genome amplification, and the same SRA dataset (SAMEA120102800) was used for all three type genomes.

Order *Protisticellales*

Etymology
[Pro.tis.ti.cel.la'les] **N.L. fem. n.** *Protisticella*, referring to the type genus *Protisticella*; *-ales*, ending to denote an order; **N.L. fem. pl. n.** *Protisticellales*, the *Protisticella* order

Nomenclatural type
Genus *Protisticella*

Description
The type genus of the class is *Protisticella*.

Classification
Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Protisticellales*

References
Effective publication: Bolzoni et al., 2026 [1]

Registry URL
https://seqco.de/i:51456

Family *Protisticellaceae*

Etymology
[Pro.tis.ti.cel.la'ce.ae] **N.L. fem. n.** *Protisticella*, referring to the type genus *Protisticella*; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Protisticellaceae*, the *Protisticella* family

Nomenclatural type
Genus *Protisticella*

Description
The type genus of the class is *Protisticella*.

Classification
Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Protisticellales* » *Protisticellaceae*

References
Effective publication: Bolzoni et al., 2026 [1]

Registry URL
https://seqco.de/i:51455

Genus *Endodesulfobacter*

Etymology
[En.do.de.sul.fo.bac'ter.] **Gr. pref.** *endo-*, within; **N.L. pref.** *desulfo-*, desulfuricating; **N.L. masc. n.** *bacter*, rod or staff; **N.L. masc. n.** *Endodesulfobacter*, an endosymbiotic rod-shaped sulfate-reducing bacterium

Nomenclatural type
Species *Endodesulfobacter magneticus*[Ts]

Description
The description is the same as for the nomenclatural type *Endodesulfobacter magneticus*.

Classification
Bacteria » *Desulfobacterota* » *Desulfovibrionia* » *Desulfovibrionales* » *Desulfovibrionaceae* » *Endodesulfobacter*

References
Effective publication: Bolzoni et al., 2026 [1]

Registry URL
https://seqco.de/i:51446

Genus *Midichloriella*

Etymology
[Mi.di.chlo.ri.el'la] **N.L. fem. dim. n.** *Midichloriella*, little *Midichloria*, referencing the sister genus of this lineage and referring to the midichlorians, organisms within the fictional Star Wars universe

Nomenclatural type
Species *Midichloriella endociliophora*[Ts]

Description
The description is the same as for the nomenclatural type *Midichloriella endociliophora.*

Classification
Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Rickettsiales* » “Midichloriaceae” » *Midichloriella*

References
Effective publication: Bolzoni et al., 2026 [1]

Registry URL
https://seqco.de/i:51341

Genus *Protisticella*

Etymology
[Pro.tis.ti.cel'la] **N.L. neut. pl. n.** *Protista*, protists; **L. fem. n.** *cella*, a store-room and, in biology, a cell; **N.L. fem. n.** *Protisticella*, a cell from protists, referring to the endosymbiotic interaction between this bacterium and its protist host

Nomenclatural type
Species *Protisticella dordognensis*[Ts]

Description
The description is the same as for the nomenclatural type *Protisticella dordognensis*.

Classification
Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Protisticellales* » *Protisticellaceae* » *Protisticella*

References
Effective publication: Bolzoni et al., 2026 [1]

Registry URL
https://seqco.de/i:51454

Species *Endodesulfobacter magneticus*[Ts]

Etymology
[mag.ne'ti.cus.] **L. masc. adj.** *magneticus*, magnetic

Nomenclatural type
Genome sc|0004070 [Ts]

Description
Endosymbiotic rod-shaped bacterium of a freshwater magnetotactic ciliate forming magnetite magnetosomes.

Classification
Bacteria » *Desulfobacterota* » *Desulfovibrionia* » *Desulfovibrionales* » *Desulfovibrionaceae* » *Endodesulfobacter* » *Endodesulfobacter magneticus*[Ts]

References
Effective publication: Bolzoni et al., 2026 [1]
Corrigendum: Bolzoni et al., 2026 [2] (from “Endodesulfobacter magneticum”)

Registry URL
https://seqco.de/i:51447

Species *Midichloriella endociliophora*[Ts]

Etymology
[en.do.ci.li.o.pho'ra] **Gr. pref.** *endo-*, inside; **N.L. fem. pl. n.** *Ciliophora*, the *Ciliophora* phylum of protists; **N.L. fem. adj.** *endociliophora*, inside *Ciliophora*, referring to the endosymbiotic interaction between this bacterium and its *Ciliophora* host

Nomenclatural type
Genome sc|0003934 [Ts]

Description
Endosymbiotic rod-shaped bacteria of a freshwater magnetotactic ciliate.

Classification
Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Rickettsiales* » “Midichloriaceae” » *Midichloriella* » *Midichloriella endociliophora*[Ts]

References
Effective publication: Bolzoni et al., 2026 [1]

Registry URL
https://seqco.de/i:51342

Species *Protisticella dordognensis*[Ts]

Etymology
[dor.do.gnen'sis] **N.L. fem. adj.** *dordognensis*, of Dordogne, referring to the Dordogne region and the Dordogne River (France), where this organism was collected with its host

Nomenclatural type
Genome sc|0004073 [Ts]

Description
Endosymbiotic rod-shaped bacteria of a freshwater magnetotactic ciliate from the Dordogne River (France).

Classification
Bacteria » *Pseudomonadota* » *Gammaproteobacteria* » *Protisticellales* » *Protisticellaceae* » *Protisticella* » *Protisticella dordognensis*[Ts]

References
Effective publication: Bolzoni et al., 2026 [1]
Corrigendum: Bolzoni et al., 2026 [2] (from “Protisticella dordonia”)

Registry URL
https://seqco.de/i:51453

References

1. Bolzoni et al. (2026). Magnetoreception in a freshwater ciliate arises from endosymbiosis. *Nature Communications*. DOI: 10.1038/s41467-026-70462-8
2. Bolzoni et al. (2026). Author Correction: Magnetoreception in a freshwater ciliate arises from endosymbiosis. *Nature Communications*. DOI: 10.1038/s41467-026-74787-2

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:dgcae3s5** submitted by **Monteil, Caroline L.** and including 8 new names has been successfully validated.

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