

## Family *Candidatus* Midichloriaceae

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### Etymology

[Mi.di.chlo.ri.a.ce'a.e] **N.L. n.** *Midichloria*, type genus of the family; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Midichloriaceae*, the family of the genus “Candidatus Midichloria”

### Nomenclatural type

Unknown

### Description

**Montagna et al (2013):** The new family encompasses bacteria associated with a wide range of hosts, from protists to vertebrates, including humans; all of the members of this family that have so far been investigated by transmission electron microscopy have been shown to be intracellular, with a typical Gram-negative cell wall.

**Note:** This group is sometimes referred to as MALO (midichloria and like organisms).

**Note:** The following addendum in proof appeared in **Montagna et al (2013)**: On the same day this study was accepted for publication, an advanced online publication presented data on a novel bacterium phylogenetically related to “*Ca. M. mitochondrii*” (T. Driscoll et al., *Genome Biol. Evol.* doi:10.1093/gbe/evt036, 2013) and referred to this species and related organisms as “*Midichloriaceae*,” following a previous informal proposal to rank this bacterial group at the family level, discussed in a recent book chapter (J. J. Gillespie, E. Nordberg, A. F. Azad, and B. W. Sobral, p. 84–141, in A. F. Azad and G. H. Palmer, ed., *Intracellular pathogens II. Rickettsiales*, 2012).

**Note:** Similarly, a note was added in proof to **Driscoll et al (2013)**: During the production of this work, a recent publication (Montagna et al. 2013) formally classified a novel Rickettsiales family, *Candidatus* Midichloriaceae, for which the Rickettsiales endosymbiont of *Trichoplax adhaerens* is a member.

### Classification

*Bacteria* » *Pseudomonadota* » *Alphaproteobacteria* » *Rickettsiales* » *Candidatus* Midichloriaceae

### References

Proposed: Montagna et al., 2013

### Registry URL

<https://seqco.de/i:58>

## References

1. Montagna et al. (2013). “*Candidatus* Midichloriaceae” fam. nov. (Rickettsiales), an Ecologically Widespread Clade of Intracellular Alphaproteobacteria. *Applied and Environmental Microbiology*. DOI:10.1128/aem.03971-12