

Phylum *Chlamydiota*

Etymology

[Chla.my.di.o'ta] **N.L. fem. n.** *Chlamydia*, type genus of the phylum; *-ota*, ending to denote a phylum; **N.L. pl. neut. n.** *Chlamydiota*, the Chlamydia phylum

Nomenclatural type

Genus *Chlamydia*

Description

Garrity and Holt (2001): The phylum *Chlamydiae* is defined on the basis of 16S rDNA sequence data as a separate evolutionary lineage within the Bacteria. Ludwig and Klenk regard the *Chlamydiae* as a sister group of the *Verrucomicrobia*, but caution that the relationship is tentative. More recently, Everett et al. (1999) proposed an emendation of the *Chlamydiales*, subdividing the order into four families: *Chlamydiaceae*, *Parachlamydiaceae*, *Simkaniaceae*, and *Waddliaceae*. We have incorporated this scheme into the current version of the outline and have added the class "*Chlamydiae*" and the phylum *Chlamydiae* to complete the hierarchy. In PCA plots, the *Chlamydiaceae*, *Parachlamydiaceae*, and *Waddliaceae* form a tightly clustered group that is clearly separated from the *Planctomycetes* and *Verrucomicrobia*, with which the *Chlamydiae* have often been grouped. The *Simkaniaceae* are clearly separate from the remaining members of the phylum, an observation that is consistent with the published trees (Everett et al., 1999), suggesting a possible misplacement. All members of the phylum are nonmotile, obligately parasitic, coccoid bacteria that multiply within membrane-bound vacuoles in the cytoplasm of cells of mammalian and avian origin. Gram-negative or Gram-variable (*Parachlamydia*). Multiplication occurs by means of a complex life cycle. Pathogenic. Cell walls do not contain muramic acid or only a trace. (BMDB9 Group 9).

Oren and Garrity (2021): The properties of the taxon are as described by Garrity and Holt (2001). Correction of the effectively published synonym: *Chlamydiae* (sic) Garrity and Holt 2001. Type genus: *Chlamydia* Jones *et al.* 1945 (Approved Lists 1980).

Classification

Bacteria » *Chlamydiota*

References

Effective publication: Oren, Garrity, 2021 [1]
Original (not valid) publication: Garrity, Holt, 2001 [2]
Corrigendum: Oren, Garrity, 2021 [1] (from "Chlamydiae")

Registry URL

<https://seqco.de/i:5005>

References

1. Oren, Garrity (2021). Valid publication of the names of forty-two phyla of prokaryotes. *International Journal of Systematic and Evolutionary Microbiology*. DOI:10.1099/ijsem.0.005056
2. Garrity, Holt (2001). The Road Map to the Manual. *Bergey's Manual® of Systematic Bacteriology*. DOI:10.1007/978-0-387-21609-6_15