

Genus *Candidatus Chloracidobacterium*

Etymology

[Chlor.a.ci.do.bac.te'ri.um] Gr. adj. *chlóros*, greenish-yellow, pale green; N.L. *Acidobacterium*, a bacterial genus; N.L. *Chloracidobacterium*, a green Acidobacterium

Nomenclatural type

Unknown

Description

Tank, Bryant (2015): Microaerophilic, moderately thermophilic, anoxygenic, chlorophotoheterotrophic eubacterium. Cells are Gram-stain-negative, non-motile rods that divide by binary fission. Cells have chlorosomes as light-harvesting organelles, and the BChl *a*-binding Fenna-Matthews-Olson protein for light energy transfer to homodimeric type-1 reaction centres. Cells synthesize bacteriochlorophylls *c* and *a* P, chlorophyll *a* PD, Zn-bacteriochlorophyll *a*'P, echinenone and canthaxanthin as the major pigments. Based upon 16S rRNA sequence analysis, the new genus is assigned to subdivision 4 (*Acidobacteriaceae*) of the phylum *Acidobacteria*. The type species is *Chloracidobacterium thermophilum*.

Classification

Bacteria » *Acidobacteriota* » *Blastocatellia* » “Chloracidobacteriales” » “Chloracidobacteriaceae” » *Candidatus Chloracidobacterium*

References

Effective publication: Bryant et al., 2007 [1]
Emendavit: Tank, Bryant, 2015 [2]

Registry URL

<https://seqco.de/i:215>

References

1. Bryant et al. (2007). *Candidatus Chloracidobacterium thermophilum*: An Aerobic Phototrophic Acidobacterium. *Science*. DOI:10.1126/science.1143236
2. Tank, Bryant (2015). *Chloracidobacterium thermophilum* gen. nov., sp. nov.: an anoxygenic microaerophilic chlorophotoheterotrophic acidobacterium. *International Journal of Systematic and Evolutionary Microbiology*. DOI:10.1099/ijs.0.000113