

Species *Candidatus Adiutrix intracellularis*

Etymology

L. *intra*, within; L. fem. n. *cellula*, a small chamber or cell; L. fem. suff. *-aris*, suffix denoting pertaining to; N.L. fem. adj. *intracellularis*, intracellular

Nomenclatural type

Unknown

Description

Properties: Rod-shaped bacteria (approximately 0.5–0.6 in diameter and 0.8–1.9 mm in length) with slightly pointed ends. Form a monophyletic group with the SSU rRNA genes of other *Deltaproteobacteria* from termite guts. Possesses genes coding for production of acetate from CO₂ and H₂ (Wood–Ljungdahl pathway) and nitrogen fixation. Colonize the cytoplasm of the parabasalid flagellate *Trichonympha collaris* in the hindgut of the termite *Zootermopsis nevadensis*.

So far uncultured. The basis of assignment is the SSU rRNA gene sequences of representative phylotypes (Accession No. AB972401; AB894435–AB894480) and hybridization with the specific SSU rRNA-targeted oligonucleotide probe Delta-Tr3-Zn (5'-CTT GAA CCG AAG TTC CTG-3'). A draft genome of strain Adiu1, reconstructed from metagenome sequences, has been deposited in the Integrated Microbial Genomes (IMG) database (IMG Taxon ID: 2556793040) and the GenBank database (LQAA00000000).

Classification

Bacteria » *Pseudomonadota* » *Deltaproteobacteria* » “Adiutricales” » “Adiutricaceae” » *Candidatus Adiutrix* » *Candidatus Adiutrix intracellularis*

References

Effective publication: Ikeda-Ohtsubo et al., 2016 [1]

Registry URL

<https://seqco.de/i:424>

References

1. Ikeda-Ohtsubo et al. (2016). ‘*Candidatus Adiutrix intracellularis*’, an endosymbiont of termite gut flagellates, is the first representative of a deep-branching clade of *Deltaproteobacteria* and a putative homoacetogen. *Environmental Microbiology*. DOI:10.1111/1462-2920.13234