

Species *Electrothrix communis*^{Ts}

Etymology

[com.mu'nis] L. fem. adj. *communis*, common

Nomenclatural type

[NCBI Assembly: GCA_030644725.1](#)^{Ts}

Reference Strain

RB

Description

Filamentous bacteria of centimeter length that inhabit the surface of brackish/intertidal sediment and conduct electrons from sulfide-oxidizing cells to oxygen-reducing cells. Gliding motility. Gram-negative, with 15 distinct ridges running longitudinally along the filament. Width of individual cells is 0.8 µm. Can assimilate acetate and propionate; CO₂ fixation via the Wood-Ljungdahl pathway. Contains c-type cytochromes, type IV pili (PilA) and Na⁺ antiporters. Polyphosphate and polyglucose storage. Distinguishable by morphology and genome.

Classification

Bacteria » *Desulfobacterota* » *Desulfobulbia* » *Desulfobales* » *Desulfobulbaceae* » *Electrothrix* » *Electrothrix communis*^{Ts}

References

Effective publication: Plum-Jensen et al., 2024 [1]
Assigned taxonomically: Trojan et al., 2016 [2]

Registry URL

<https://seqco.de/i:32139>

References

1. Plum-Jensen et al. (2024). First single-strain enrichments of *Electrothrix* cable bacteria, description of *E. aestuarii* sp. nov. and *E. rattekaaensis* sp. nov., and proposal of a cable bacteria taxonomy following the rules of the SeqCode. *Systematic and Applied Microbiology*. DOI:10.1016/j.syapm.2024.126487
2. Trojan et al. (2016). A taxonomic framework for cable bacteria and proposal of the candidate genera *Electrothrix* and *Electronema*. *Systematic and Applied Microbiology*. DOI:10.1016/j.syapm.2016.05.006