

Species *Electrothrix rattekaaiensis*

Etymology

[rat.te.kaai.en'sis] N.L. fem. adj. *rattekaaiensis*, from Rattekaai, referring to the location of sample collection

Nomenclatural type

[NCBI Assembly: GCA_032595675.1](#)^{TS}

Reference Strain

Rat3

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 1.2 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 rattekaaiensis*

References

Effective publication: Plum-Jensen et al., 2024 [1]

Registry URL

<https://seqco.de/i:33364>

References

1. Plum-Jensen et al. (2024). First single-strain enrichments of *Electrothrix* cable bacteria, description of *E. aestuarii* sp. nov. and *E. rattekaaiensis* 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](https://doi.org/10.1016/j.syapm.2024.126487)