

## Species *Electronema aureum*<sup>Ts</sup>

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### Etymology

[a.u.re'um] L. neut. adj. *aureum*, golden

### Nomenclatural type

[NCBI Assembly: GCA\\_004284765.1](#)<sup>Ts</sup>

### Reference Strain

GS

### Description

Filamentous bacteria of centimeter length that inhabit the surface of freshwater sediment and conduct electrons from sulfide-oxidizing cells to oxygen- or nitrate-reducing cells. Gliding motility. Gram-negative, with 40 distinct ridges running longitudinally along the filament. Width of individual cells is  $1.7 \pm 0.1 \mu\text{m}$ . Can assimilate acetate but not propionate; CO<sub>2</sub> fixation via the Wood-Ljungdahl pathway. Contains c-type cytochromes and type IV pili (PilA). Polyphosphate and polyglucose storage. Distinguishable by morphology and genome.

### Classification

*Bacteria* » *Desulfobacterota* » *Desulfobulbia* » *Desulfobales* » *Desulfobulbaceae* » *Electronema* » *Electronema aureum*<sup>Ts</sup>

### References

Effective publication: Thorup et al., 2021 [1]

### Registry URL

<https://seqco.de/i:736>

## References

1. Thorup et al. (2021). How to grow your cable bacteria: Establishment of a stable single-strain culture in sediment and proposal of Candidatus *Electronema aureum* GS. *Systematic and Applied Microbiology*. [DOI:10.1016/j.syapm.2021.126236](https://doi.org/10.1016/j.syapm.2021.126236)