

Species *Neomicrothrix subdominans*

Etymology

[sub.do'mi.nans.] **L. prep. sub**, below; **L. pres. part. dominans**, dominant; **N.L. fem. part. adj. subdominans**, indicating the abundance of this organism often below the dominant species *Neomicrothrix parvicella*

Nomenclatural type

[NCBI Assembly: GCA_016719385.1](#) ^{Ts}

Description

Filamentous bacteria commonly found in municipal activated sludge WWTPs. The species was defined based on phylogenomic and 16S rRNA-based phylogenetic analysis. The filaments are $1.0 \pm 0.2 \mu\text{m}$ wide and $98 \pm 19 \mu\text{m}$ long. Its is a heterotroph and has a potential to reduce nitrate to nitrite. Based on metabolic potential they could consume long chain fatty acids and can accumulate and store lipids under both aerobic and anaerobic conditions. *In situ* analysis showed that they are able to store poly-P, but to not cycle it.

Classification

Bacteria » *Actinomycetota* » *Acidimicrobiia* » *Acidimicrobiales* » “*Neomicrotrichaceae*” » *Neomicrothrix* » *Neomicrothrix subdominans*

References

Effective publication: Nierychlo et al., 2021 [1]
Corrigendum: Oren, 2022 [2] (from “*Microthrix subdominans*”)

Registry URL

<https://seqco.de/i:609>

References

1. Nierychlo et al. (2021). Low Global Diversity of Candidatus *Microthrix*, a Troublesome Filamentous Organism in Full-Scale WWTPs. *Frontiers in Microbiology*. DOI:10.3389/fmicb.2021.690251
2. Oren (2022). Candidatus List No. 4: Lists of names of prokaryotic Candidatus taxa. *International Journal of Systematic and Evolutionary Microbiology*. DOI:10.1099/ijsem.0.005545