Species Makaraimicrobium thalassicum^{Ts}

Etymology

[tha.las'si.cum] **Gr. fem. n.** *thalassa*, the sea; **Gr. neut. adj. suff.** *-icum*, suffix used with the sense of pertaining to; **N.L. neut. adj.** *thalassicum*, of the sea

Nomenclatural type

NCBI Assembly: GCA_003644505.1 Ts

Description

This species is the type for the genus *Makaraimicrobium*. Estimated genome size for this species is 2 Mb. %GC content for this genome is 48.46%. No large ORF is encoded by this species. A basic acetogenic pathway for fermentation of sugars is encoded by the genome of this species. This may couple the oxidative ATP-yielding reactions of the EMP pathway, with an Rnf complex for redox balancing and a horse-shoe type TCA cycle. Of the respiratory complexes, only a respiratory F-type ATPase is encoded by this genome. Additionally, a "symbiotic" F-type ATPase and components for a Type-4 a pilus is encoded by the genome. The assembly for this species was recovered from a metagenomic sediment sample from a deep-sea hydrothermal vent from Guaymas Basin, Gulf of California, Mexico, where a temperature of 10 °C has been reported. The nomenclatural type for the species is the genome GCA_003644505.1.

Classification

Bacteria » Omnitrophota » "Gorgyraia" » "Tantalellales" » "Tantalellaceae" » Makaraimicrobium » Makaraimicrobium thalassicum^{Ts}

References

Effective publication: Seymour et al., 2023 [1]

Registry URL

https://seqco.de/i:23710

References

1. Seymour et al. (2023). Hyperactive nanobacteria with host-dependent traits pervade Omnitrophota. *Nature Microbiology*. DOI:10.1038/s41564-022-01319-1