

Species *Methyloquor ceniphilum*^{Ts}

Etymology

[ce.ni.phi'lum] **L. fem. n.** *cena*, the principal meal of the day in ancient Roman culture, originally taken in the afternoon; **N.L. masc. adj. suff.** *-philus*, loving; **N.L. neut. adj.** *ceniphilum*, late afternoon meal loving

Nomenclatural type

[NCBI Assembly: GCA_902617375.1](#)^{Ts}

Description

Uncultivated bacteria in the order *Methyloquorales* (previously GTDB o__TMED127) and family *Methyloquoraceae* (previously GTDB f__TMED127) have small, streamlined genomes (~1.5 Mb) and appear to be obligate lanthanide-dependent methylotrophs that use the serine cycle for carbon assimilation. *Methyloquor ceniphilum* showed a diel pattern of lanthanide-dependent methanol dehydrogenase (*xoxF5*) and glucose dehydrogenase (*gdh*) transcription, peaking in the late afternoon, in oligotrophic surface water of the Sargasso Sea.

Classification

Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Methyloquorales* » *Methyloquoraceae* » *Methyloquor* » *Methyloquor ceniphilum*^{Ts}

References

Effective publication: Glass et al., 2025 [1]

Registry URL

<https://seqco.de/i:51448>

References

1. Glass et al. (2025). Diel cycle of lanthanide-dependent methylotrophy by TMED127/Methyloquorales bacteria in oligotrophic surface seawater. *Applied and Environmental Microbiology*. [DOI:10.1128/aem.01181-25](https://doi.org/10.1128/aem.01181-25)