

Genus *Methyloequor*

Etymology

[Me.thyl.æ'quor] **N.L. neut. n.** *methyl*, the methyl group; **L. neut. n.** *aequor*, surface of the sea; **N.L. neut. n.** *Methyloequor*, a methyl group-oxidizing organism of the sea surface

Nomenclatural type

Species *Methyloequor ceniphilum*^{TS}

Description

Uncultivated bacteria in the order Methyloequorales (previously GTDB o_TMED127) and family Methyloequoraceae (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.

Classification

Bacteria » *Pseudomonadota* » *Alphaproteobacteria* » *Methyloequorales* » *Methyloequoraceae* » *Methyloequor*

References

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

Registry URL

<https://seqco.de/i:51450>

References

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