

Genus *Methanomethylophilus*

Etymology

[Me.tha.no.me.thy.lo'phi.lus] N.L. neut. n. *methanum*, methane; N.L. pref. *methylo-*, pertaining to the methyl group; N.L. masc. adj. suff. *-philus*, loving; N.L. masc. n. *Methanomethylophilus*, methane-producing organism loving methyl groups.

Nomenclatural type

Species *Methanomethylophilus alvi*^T

Description

The genus is defined by relative evolutionary divergence (RED) and phylogenomic analysis as a monophyletic group. Strictly anaerobic and chemoheterotrophic cocci. Utilize methanol and mono-, di- and trimethylamines only in combination with H₂ as substrates for methanogenesis.

Classification

Archaea » Methanobacteriota » Thermoplasmata » Methanomassiliicoccales » Methanomethylophilaceae » *Methanomethylophilus*

References

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

Registry URL

<https://seqco.de/i:428>

References

1. Borrel et al. (2023). *Methanomethylophilus alvi* gen. nov., sp. nov., a Novel Hydrogenotrophic Methyl-Reducing Methanogenic Archaea of the Order Methanomassiliicoccales Isolated from the Human Gut and Proposal of the Novel Family Methanomethylophilaceae fam. nov. *Microorganisms*. DOI:10.3390/microorganisms11112794