

Genus *Methanocatella*

Etymology

[Me.tha.no.ca.tel'la] **N.L. pref.** *methano-*, pertaining to methane; **L. fem. dim. n.** *catella*, a little chain; **N.L. fem. dim. n.** *Methanocatella*, a methane-producing chain, referring to the short chains of cells characteristic of this genus

Nomenclatural type

Species *Methanocatella smithii*^{TS}

Description

The genus is defined by relative evolutionary divergence (RED) and phylogenomic analysis as a monophyletic group. Short oval rods or coccobacilli, 0.4–1 µm in width and 0.6–1.5 µm in length. Cells occur singly, in pairs or in chains of 4–6 cells. Gram positive. Nonmotile. Require complex medium with yeast extract, trypticase, rumen fluid, or fecal extract. Optimum temperature is 35–42 °C. Use H₂ + CO₂ as substrates for methanogenesis, some species grow poorly on formate.

Classification

Archaea » *Methanobacteriota* » *Methanobacteria* » *Methanobacteriales* » *Methanobacteriaceae* » *Methanocatella*

References

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

Registry URL

<https://seqco.de/i:32432>

References

1. Protasov et al. (2023). Diversity and taxonomic revision of methanogens and other archaea in the intestinal tract of terrestrial arthropods. *Frontiers in Microbiology*. DOI:10.3389/fmicb.2023.1281628