

Species *Methanocella ebodensis*

Etymology

[e.bo.den'sis] **N.L. fem. adj.** *ebodensis*, of Eboda, a significant ancient Nabataean city situated along the "Incense Route", close to the location where the strain was isolated.

Nomenclatural type

[NCBI Assembly: GCA_049676595.1](#) ^{Ts}

Description

Phylogenetically affiliated with the genus *Methanocella*, phylum *Halobacteriota*. The genome consists of one circular chromosome of 3,614,771 bp. The DNA G + C content is 54.73 mol%. Strain *Methanocella ebodensis* WT was cultivated from biocrust of the Negev desert, Israel. Soil hydrogenotrophic methanogen with a rod-shaped morphology. Cells typically measure ~0.8 µm in diameter and 7-8 µm in length. The strain was routinely cultured with 10% H₂ at 37°C in fresh water basal medium and subjected to 5% air regularly.

Classification

Archaea » Halobacteriota » Methanocellia » Methanocellales » Methanocellaceae »
Methanocella » *Methanocella ebodensis*

References

Effective publication: Tian et al., 2026 [1]
Assigned taxonomically: Sakai et al., 2008 [2]

Registry URL

<https://seqco.de/i:50976>

References

1. Tian et al. (2026). Cultivation and genomic characterization of novel methanogens from arid desert biocrust. *ISME Communications*. DOI:10.1093/ismeco/ycag013
2. Sakai et al. (2008). *Methanocella paludicola* gen. nov., sp. nov., a methane-producing archaeon, the first isolate of the lineage 'Rice Cluster I', and proposal of the new archaeal order Methanocellales ord. nov. *INTERNATIONAL JOURNAL OF SYSTEMATIC AND EVOLUTIONARY MICROBIOLOGY*. DOI:10.1099/ijs.0.65571-0