

## Genus *Methanobinarius*

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### Etymology

[Me.tha.no.bi.na'ri.us] N.L. **pref.** *methano-*, pertaining to methane; L. **masc. adj.** *binarius*, consisting of two things; N.L. **masc. n.** *Methanobinarius*, methane-producing (organism) consisting of two things, referring to the pairs of cells formed by the type species

### Nomenclatural type

Species *Methanobinarius arboriphilus*<sup>Ts</sup>

### Description

The genus is defined by relative evolutionary divergence (RED) and phylogenomic analysis as a monophyletic group. Short oval rods that occur singly, in pairs or in short chains. Gram positive. Nonmotile. Use H<sub>2</sub> + CO<sub>2</sub> as substrates for methanogenesis, might also grow poorly on formate. Grow poorly on mineral medium with vitamins; yeast extract, casamino acids, and rumen fluid strongly stimulate growth. Optimum temperature is 30–37 °C.

### Classification

*Archaea* » *Methanobacteriota* » *Methanobacteria* » *Methanobacteriales* » *Methanobacteriaceae* » *Methanobinarius*

### References

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

### Registry URL

<https://seqco.de/i:32442>

## 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](https://doi.org/10.3389/fmicb.2023.1281628)