

## Species *Methylomirabilis oxygeniifera*<sup>Ts</sup>

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### Etymology

[o.xy.ge.ni.i.fe'ra] N.L. fem. adj. *oxygeniifera*, carrying oxygen

### Nomenclatural type

[NCBI Assembly: GCA\\_000091165.1](#)<sup>Ts</sup>

### Description

The description is the same as given by Ettwig et al., 2010: Methane-oxidizing and nitrite-reducing bacterium of the candidate division NC10. Grows anaerobically, but produces oxygen for the aerobic oxidation of methane. Reduces nitrite to dinitrogen gas without a nitrous oxide reductase. Gram-negative rod with a diameter of 0.25–0.5 μm and a length of 0.8–1.1 μm. Mesophilic with regard to temperature and pH (enriched at 25–30 °C and pH 7–8). Slow growth (doubling time 1–2 weeks).

### Classification

*Bacteria* » “Methylomirabilota” » “Methylomirabilia” » “Methylomirabilales” » “Methylomirabilaceae” »  
*Methylomirabilis* » *Methylomirabilis oxygeniifera*<sup>Ts</sup>

### References

Proposed: Ettwig et al., 2010  
*Corrigendum*: Oren, 2017 (from “Methylomirabilis oxyfera”)

### Registry URL

<https://seqco.de/i:45>

## References

1. Ettwig et al. (2010). Nitrite-driven anaerobic methane oxidation by oxygenic bacteria. *Nature*. [DOI:10.1038/nature08883](https://doi.org/10.1038/nature08883)
2. Oren (2017). A plea for linguistic accuracy – also for Candidatus taxa. *International Journal of Systematic and Evolutionary Microbiology*. [DOI:10.1099/ijsem.0.001715](https://doi.org/10.1099/ijsem.0.001715)