

Genus *Nitrosymbium*

Etymology

[Ni.tro.sym.bi'um] **N.L. pref.** *nitro-*, pertaining to nitrate; **Gr. pref.** *sym-*, together; **Gr. masc. n.** *bios*, life; **N.L. neut. n.** *Nitrosymbium*, nitrate-forming symbiont

Nomenclatural type

Species *Nitrosymbium coscinodermæ*^{Ts}

Description

nitrite-oxidizing bacteria associated with marine sponges; they gain energy for CO₂ fixation via the oxidation of nitrite to nitrate;
belonging to the lineage IVb *Nitrospirales* (previously referred to as “bin75”); members of this genus are predominantly associated with marine sponges (i.e., *Aplysina aerophoba*, *Coscinoderma matthewsi*, *Ircinia ramosa*, *Ircinia* sp., and *Stylissa flabelliformis*).

Classification

Bacteria » *Nitrospirota* » *Nitrospira* » *Nitrospirales* » *Nitrospiraceae* » *Nitrosymbium*

References

Effective publication: Glasl et al., 2024 [1]

Registry URL

<https://seqco.de/i:33379>

References

1. Glasl et al. (2024). Co-occurring nitrifying symbiont lineages are vertically inherited and widespread in marine sponges. *The ISME Journal*. [DOI:10.1093/ismejo/wrae069](https://doi.org/10.1093/ismejo/wrae069)