

Genus *Nitrosocosmicus*

Etymology

[Ni.tro.so.cos'mi.cus] **N.L. suff.** *nitroso-*, full of natron, here referring to nitrite; **L. masc. adj.** *cosmicus*, cosmopolitan; **N.L. masc. n.** *Nitrosocosmicus*, cosmopolitan producer of nitrite

Nomenclatural type

Species *Nitrosocosmicus franklandianus*^{Ts}

Description

A widely distributed genus of chemolithoautotrophic ammonia-oxidising archaea (AOA) within the validated family *Nitrososphaeraceae*. Cells are coccid. Able to use ammonia as a source of energy with some strains also ureolytic. A greater tolerance to high ammonia concentrations compared to other AOA may be a feature of all strains of this genus.

Classification

Archaea » Thermoproteota » Nitrososphaeria » Nitrososphaerales » Nitrososphaeraceae » *Nitrosocosmicus*

References

Effective publication: Lehtovirta-Morley et al., 2016 [1]
Assigned taxonomically: Stieglmeier et al., 2014 [2]

Registry URL

<https://seqco.de/i:56407>

References

1. Lehtovirta-Morley et al. (2016). Isolation of '*CandidatusNitrosocosmicus franklandus*', a novel ureolytic soil archaeal ammonia oxidiser with tolerance to high ammonia concentration. *FEMS Microbiology Ecology*. DOI:10.1093/femsec/fiw057
2. Stieglmeier et al. (2014). Nitrososphaera viennensis gen. nov., sp. nov., an aerobic and mesophilic, ammonia-oxidizing archaeon from soil and a member of the archaeal phylum Thaumarchaeota. *International Journal of Systematic and Evolutionary Microbiology*. DOI:10.1099/ijs.0.063172-0