

Species *Nanobdella aerobiophila*^T

Etymology

[ae.ro.bi.o'phi.la] Gr. n. masc. or fem. *aer*, air; Gr. masc. n. *bios*, life; Gr. masc. adj. *philos*, loving; N.L. fem. adj. *aerobiophila*, aerobic-loving organism, indicating its symbiotic association with an aerobic host organism

Nomenclatural type

Strain: DSM 111728 = JCM 33616 = MJ1

Description

Grows under the aerobic conditions with the specific host archaeon *Metallosphaera sedula* strain MJ1HA (=JCM 33617). Growth

occurs at 60–75 °C (optimum, 65–70 °C) and pH 1.0–4.0 (optimum, pH 2.5). Under optimal growth conditions, doubling time is

9.6h. Growth occurs with elemental sulphur or proteinaceous substances in a co-culture with the host archaeon, strain MJ1HA.

DNA G+C content is 24.9mol% (determined from the genome sequence).

The type strain is MJ1(T) (=JCM 33616(T)=DSM 111728(T)). The strain was isolated from a fluid of terrestrial acidic hot spring in

Oku-shiobara, Tochigi, Japan.

Classification

Archaea » *Nanobdellota* » *Nanobdellia* » *Nanobdellales* » *Nanobdellaceae* » *Nanobdella* » *Nanobdella aerobiophila*^T

References

Effective publication: Kato et al., 2022 [1]

Registry URL

<https://seqco.de/i:23601>

References

1. Kato et al. (2022). *Nanobdella aerobiophila* gen. nov., sp. nov., a thermoacidophilic, obligate ectosymbiotic archaeon, and proposal of Nanobdellaceae fam. nov., Nanobdellales ord. nov. and Nanobdellia class. nov. *International Journal of Systematic and Evolutionary Microbiology*. DOI:10.1099/ijsem.0.005489