

Genus *Australarchaeum*

Etymology

[Aus.tral.ar.chae'um] **L. masc. adj.** *australis*, Southern; **N.L. neut. n.** *archaeum*, archaeum, ancient one, archaeon; **N.L. neut. n.** *Australarchaeum*, an archaeon from the south

Nomenclatural type

Species *Australarchaeum erebusense*^{Ts}

Description

The type of the genus is an Archaeon found only in soils heated by volcanic activity (65 degree C) on Mt. Erebus in Antarctica. Analysis of metabolic pathways indicates the presence of fatty acid oxidation, amino acid degradation and an aerobic lifestyle. There are indications that either the same species or another species of the same genus can be found on Mt. Melbourne and Mt. Rittmann, both also in Antarctica. GTDB-Tk indicates that this genome represented a novel Order of Nitrososphaeria.

Classification

Incertae sedis (Archaea) » *Australarchaeum*

References

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

Registry URL

<https://seqco.de/i:49006>

References

1. Herbold et al. (2024). Nutritional niches of potentially endemic, facultatively anaerobic heterotrophs from an isolated Antarctic terrestrial hydrothermal refugium elucidated through metagenomics. *Environmental Microbiome*. [DOI:10.1186/s40793-024-00655-5](https://doi.org/10.1186/s40793-024-00655-5)