
Class *Penumbrarchaeia*

Etymology

[Pe.num.brar.chae'i.a] **N.L. neut. n.** *Penumbrarchaeum*, referring to the type genus *Penumbrarchaeum*; *-ia*, ending to denote a class; **N.L. neut. pl. n.** *Penumbrarchaeia*, the *Penumbrarchaeum* class

Nomenclatural type

Genus *Penumbrarchaeum*

Description

The description is the same as for *Candidatus Penumbrarchaeum* gen. nov. with the following additions: *Candidatus Penumbrarchaeia* class. nov. comprises the type order *Candidatus Penumbrarchaeales* ord. nov. and Order 2, Order 3 and Order 4, three previously unidentified orders in this class. Members of Order 3 and Order 4 are anaerobes inhabiting the water column of oxygen minimum and oxygen deficient zones, not capable of protein degradation based on metabolic potential.

Classification

Archaea » *Thermoplasmatota* » *Penumbrarchaeia*

References

Effective publication: Maeke et al., 2025 [1]

Registry URL

<https://seqco.de/i:49913>

References

1. Maeke et al. (2025). Extensive data mining uncovers novel diversity among members of the rare biosphere within the Thermoplasmatota. *Microbiome*. DOI:10.1186/s40168-025-02140-8