

Species *Terraquivivens ruidianensis*

Etymology

[rui.di.an.en'sis] N.L. fem. adj. *ruidianensis*, of Ruidian, referring to the Ruidian geothermal fields, Yunnan, China, where these organisms were identified from

Nomenclatural type

[NCBI Assembly: GCA_023267885.1](#)^{Ts}

Description

Two MAGs of this organism were recovered from environmental sequencing of samples from Jinze hot spring, in the Rehai geothermal field, Tengchong, Yunnan, China. The binned genomes are 1,273,812 bp in 8 contigs, and 1,298,744 bp in 50 contigs, respectively, and both genomes have a G+C content of 47.5 %. The genome completeness estimates for both are 98.5 %, with very low (0.97%) contamination based on CheckM. Phylogenomic analysis of the 120 archaeal marker genes in the ar122 dataset places this taxon in the proposed candidate genus, *Terraquivivens*, in the proposed candidate family *Wolframiiaptoraceae*. ANI values between the two genomes are 99.9 %, while values between this taxon and other members of the genus fall below species delineation guidelines (80-82 %).

Classification

Incertae sedis (Archaea) » "Caldarchaeales" » *Wolframiiaptoraceae* » *Terraquivivens* » *Terraquivivens ruidianensis*

References

Proposed: Buessecker et al., 2022

Registry URL

<https://seqco.de/i:22828>

References

1. Buessecker et al. (2022). An essential role for tungsten in the ecology and evolution of a previously uncultivated lineage of anaerobic, thermophilic Archaea. *Nature Communications*. DOI:10.1038/s41467-022-31452-8