Lutivulcanarchaeaceae fam. nov.

Submitted by Ravin, Nikolai

Family *Lutivulcanarchaeaceae*

Etymology
[Lu.ti.vul.ca.nar.chae.a'ce.ae] **N.L. neut. n.** *Lutivulcanarchaeum*, referring to the type genus *Lutivulcanarchaeum*; *-aceae*, ending to denote a family; **N.L. fem. pl. n.** *Lutivulcanarchaeaceae*, the *Lutivulcanarchaeum* family

Nomenclatural type
Genus *Lutivulcanarchaeum*

Description
The family for *Lutivulcanarchaeum fermentans*

Classification
Archaea » “Terrarchaeota” » “Terrarchaeia” » “Terrarchaeales” » *Lutivulcanarchaeaceae*

References
Effective publication: Kadnikov et al., 2026 [1]

Registry URL
https://seqco.de/i:56542

Genus *Lutivulcanarchaeum*

Etymology
[Lu.ti.vul.ca.nar.chae'um] **L. neut. n.** *lutum*, mud; **L. masc. n.** *Vulcanus*, the Roman god of fire, used here to denote an origin from mud volcano; **N.L. neut. n.** *archaeum*, an archaeon; **N.L. neut. n.** *Lutivulcanarchaeum*, an archaeon from a mud volcano

Nomenclatural type
Species *Lutivulcanarchaeum fermentans*[Ts]

Description
The genus for *Lutivulcanarchaeum fermentans*

Classification
Archaea » “Terrarchaeota” » “Terrarchaeia” » “Terrarchaeales” » *Lutivulcanarchaeaceae* » *Lutivulcanarchaeum*

References
Effective publication: Kadnikov et al., 2026 [1]

Registry URL
https://seqco.de/i:56543

Species *Lutivulcanarchaeum fermentans*[Ts]

Etymology
[fer.men'tans] **L. neut. part. adj.** *fermentans*, fermenting, referring to the source of genome from anaerobic digestion of organic wastes

Nomenclatural type
Genome sc|0006257 [Ts]

Description
Not cultivated. Inferred to be an anaerobic, obligate organotroph that obtains energy through fermentation of low-molecular-weight organic substrates. Represented by the genome (JCBCDW010000000) assembled from the metagenome of a terrestrial mud volcano fluid.

Classification
Archaea » “Terrarchaeota” » “Terrarchaeia” » “Terrarchaeales” » *Lutivulcanarchaeaceae* » *Lutivulcanarchaeum* » *Lutivulcanarchaeum fermentans*[Ts]

References
Effective publication: Kadnikov et al., 2026 [1]
Assigned taxonomically: Kadnikov et al., 2026 [1]

Registry URL
https://seqco.de/i:56541

References

1. Kadnikov et al. (2026). Metagenomic insights into microbial communities of terrestrial mud volcanos: functional diversity of subsurface archaea and bacteria. *Frontiers in Microbiology*. DOI: 10.3389/fmicb.2026.1892847

Register List Certificate of Validation

On behalf of the *Committee on the Systematics of Prokaryotes Described from Sequence Data* (SeqCode Committee), we hereby certify that the Register List **seqco.de/r:qhz4_2m0** submitted by **Ravin, Nikolai** and including 3 new names has been successfully validated.

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