

## Species *Aceula lacicola*<sup>Ts</sup>

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### Etymology

[la.ci'co.la] L. masc. n. *lacus*, lake; L. n. suff. *-cola*, from *incola* the inhabitant; N.L. fem. n. *lacicola*, lake-dweller

### Nomenclatural type

[NCBI Assembly: GCA\\_030765785.1](#)<sup>Ts</sup>

### Description

This species is the type for the genus *Aceula*. The description for this species is derived from Williams et al., 2021, and supplemented with additional information. Genome predictions designate this species as heterotrophic and capable of the fermentation of glucose to acetyl-CoA through EMP pathway. A reversible acetyl-CoA synthetase may be indicative of acetogenesis in this species. Proteases and peptidases for the degradation of proteins to amino acids is also encoded within the genome. Additionally, simple sugar transport and glycoside hydrolases are encoded by the genome and genes required for the synthesis of trehalose and glycogen is also present (Williams et al., 2021). The genome representative of this species encodes a V-type ATPase, respiratory F-type ATPase and Rnf complex for ATP synthesis, and a Group 3d [NiFe] hydrogenase (Williams et al., 2021). All genes required for the tight-adherence complex and the production of a Type-4a pilus is present in the genome of this species, as well as genes coding for a conductive pilin. The nomenclatural type for the species is the genome designated 3300035698\_1100.

### Classification

*Bacteria* » *Omnitrophota* » “*Velamenicoccia*” » “*Zapsybrales*” » “*Aceulaceae*” » *Aceula* » *Aceula lacicola*<sup>Ts</sup>

### References

Effective publication: Williams et al., 2021 [1]

### Registry URL

<https://seqco.de/i:33276>

## References

1. Williams et al. (2021). Shedding Light on Microbial “Dark Matter”: Insights Into Novel Cloacimonadota and Omnitrophota From an Antarctic Lake. *Frontiers in Microbiology*. DOI:10.3389/fmicb.2021.741077