

Species *Kaelpia aquatica*^{Ts}

Etymology

[a.kwa'ti.ca] L. fem. adj. *aquatica*, living or found in the water.

Nomenclatural type

[NCBI Assembly: GCA_030765335.1](#)^{Ts}

Description

This species is the nomenclatural type for the genus *Kaelpia*. The description for this species is derived from Williams et al., 2021, and supplemented with additional information. This species is predicted to be heterotrophic, with a horse-shoe type TCA cycle, and encodes to proteases and peptidases to degrade proteins to amino acids. Simple sugar ABC transporters and glycoside hydrolases, along with the ability to synthesize trehalose and glycogen is predicted, and genes for the fermentation of glucose to acetyl-CoA through EMP pathway is present. A V-type ATPase and Rnf complex for ATP synthesis is present, and a Group A3 [FeFe] hydrogenase is encoded by this genome. The genome also encodes a conductive pilin and all genes associated with the production of a Type-4a pilus is present. The nomenclatural type for the species is the genome 3300035698_2000.

Classification

Incertae sedis (Bacteria) » “Kaelpiales” » “Kaelpiaceae” » *Kaelpia* » *Kaelpia aquatica*^{Ts}

References

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

Registry URL

<https://seqco.de/i:33284>

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