

Species *Neosphaerochaeta fermentans*^{Ts}

Etymology

[fer.men'tans] **L. fem. part. adj.** *fermentans*, fermenting, referring to the source of genome from a sulfoquinovose fermenting bacterium

Nomenclatural type

[NCBI Assembly: GCA_053840885.1](#)^{Ts}

Description

The designated DNA sequence is MAG SQrumen3 recovered from cow rumen. This species was enriched in anoxic incubations of rumen fluid with sulfoquinovose. Genome-centric metatranscriptomic analysis suggests sulfoquinovose is fermented to isethionate via the sulfo-transketolase pathway. The genome additionally encodes two different sulfoquinovosidases (YihQ and SsqA).

Classification

Bacteria » *Spirochaetota* » *Spirochaetia* » *Spirochaetales* » *Sphaerochaetaceae* » *Neosphaerochaeta* » *Neosphaerochaeta fermentans*^{Ts}

References

Effective publication: Krasenbrink et al., 2026 [1]

Registry URL

<https://seqco.de/i:54963>

References

1. Krasenbrink et al. (2026). Sulfoquinovose degradation by cow rumen microbiota. *The ISME Journal*. [DOI:10.1093/ismejo/wrag069](https://doi.org/10.1093/ismejo/wrag069)