Species *Brotaphodocola catenula*^{T}

Etymology

catenula

Nomenclatural type

Strain: CLA-AA-H274 = DSM 113285 = JCM 35910

Description

The species has all features of the genus. Cells are spindle-shaped to rods with slightly pointy ends (length 2-3.5 µm) and tend to form chains when grown under anaerobic conditions on YCFA medium. Genome analysis predicted the ability to utilise glucose, arbutin, salicin, starch, sulphide, and L-serine. The genes for production of acetate, propionate, L-glutamate, L-cysteine, folate, and riboflavin (vitamin B2) were also identified. Antibiotic resistance may be present due to detection of genes encoding for tetracycline-resistant ribosomal protection protein (ARO:0000002) and Erm 23S ribosomal RNA methyltransferase (ARO:3000560). The G+C content is 47.2 mol%. The type strain, CLA-AA-H274T (=DSM 113285T), was most prevalent in chicken gut microbiota (67% of 1,000 samples positive), followed by human gut microbiome (56.5%), and pig gut microbiota (50.7%). It was isolated from the faeces of a healthy 30-years-old man.

Classification

Bacteria » *Bacillota* » *Clostridia* » *Lachnospirales* » *Lachnospiraceae* » *Brotaphodocola* » *Brotaphodocola catenula*^{T}

References

Effective publication: Afrizal et al., 2022 [1]

Registry URL

https://seqco.de/i:23486

References

1. Afrizal et al. (2022). Anaerobic single-cell dispensing facilitates the cultivation of human gut bacteria. *Environmental Microbiology*. DOI:10.1111/1462-2920.15935