

Species *Enterocloster hominis*

Etymology

[ho.mi'nis] **L. gen. n.** *hominis*, of a human being, pertaining to the human gut habitat, from where the type strain was isolated

Nomenclatural type

Strain: CLA SR-H021 = DSM 118482 = LMG 33606

Description

The genome size is 6.52 Mbp, G+C percentage is 50.14%, with 99.16% completeness and 2.53% contamination. It includes a single plasmid of 7,635 bp. The closest relative to strain CLA-SR-H021 was *Enterocloster aldenensis* (98.44%) based on 16S rRNA gene analysis. ANI comparison identified CLA-SR-H021 as a novel species within the genus *Enterocloster*, with all values being below the species threshold. GTDB-Tk classified CLA-SR-H021 as '*Enterocloster pacaense*', a name derived from the proposed species '*Lachnoclostridium pacaense*'. However, the fact that these two names are not valid supports the proposition of a novel species within *Enterocloster*. Functional analysis revealed 118 transporters, 14 secretion genes, and predicted utilization of cellobiose, starch and production of propionate, acetate, and folate. In total, 307 CAZymes were identified, with 39 different glycoside hydrolase families and 14 glycoside transferase families represented. The strain CLA-SR-H021 (phylum Bacillota, family Lachnospiraceae) was isolated from human faeces.

Classification

Bacteria » *Bacillota* » *Clostridia* » *Lachnospirales* » *Lachnospiraceae* » *Enterocloster* » *Enterocloster hominis*

References

Effective publication: Hitch et al., 2025 [1]

Registry URL

<https://seqco.de/i:40011>

References

1. Hitch et al. (2025). HiBC: a publicly available collection of bacterial strains isolated from the human gut. *Nature Communications*. DOI:10.1038/s41467-025-59229-9