

Species *Flavonifractor 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 AP-H34 = DSM 118484 = LMG 33602

Description

The genome size is 2.94 Mbp, G+C percentage is 58.64%, with 99.33% completeness and 0.0% contamination. Strain CLA-AP-H34 was determined to be a new species based on 16S rRNA gene sequence analysis, with the closest validly named match being *Flavonifractor plautii* (97.21%). Separation from existing *Flavonifractor* species was confirmed by ANI comparison, which gave a value of 82.25% to *F. plautii*. GTDB-Tk classification of strain CLA-AP-H34 as an unknown species within *Flavonifractor* supports the proposal of a novel species. Functional analysis showed the strain has 112 transporters, 14 secretion genes, and predicted utilization of starch and production of L-glutamate, riboflavin, butyrate, and folate. In total, 140 CAZymes were identified, with 19 different glycoside hydrolase families and 15 glycoside transferase families represented. The strain CLA-AP-H34 (phylum *Bacillota*, family *Oscillospiraceae*) was isolated from human faeces.

Classification

Bacteria » *Bacillota* » *Clostridia* » *Eubacteriales* » *Oscillospiraceae* » *Flavonifractor* » *Flavonifractor hominis*

References

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

Registry URL

<https://seqco.de/i:48057>

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](https://doi.org/10.1038/s41467-025-59229-9)