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Other Journal Item

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Publication date: 2017

Permanent link: https://doi.org/10.3929/ethz-b-000130657

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Originally published in: Genome Announcements 5(16), <u>https://doi.org/10.1128/genomeA.00183-17</u>

PROKARYOTES



Complete and Assembled Genome Sequence of *Lactobacillus plantarum* RI-113 Isolated from Salami

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ABSTRACT We present here the complete genome sequence of *Lactobacillus plantarum* RI-113, a strain isolated from salami, which was determined using single-molecule real-time sequencing.

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actobacillus plantarum strains have been isolated from a broad spectrum of ecosystems such as silage, olives, sourdough, sauerkraut, cheese, and fermented sausages (1, 2). This habitat diversity of L. plantarum might be related to abundant gene functions resulting in a genome size which is one of the largest among lactobacilli (3, 4). L. plantarum RI-113 is a single-colony strain isolated from salami that grows at a pH of 3.5, 7.5% NaCl, and 5% ethanol at a temperature range of 14°C to 43°C in Man-Rogosa-Sharpe medium. The strain shows antifungal activity against Trichosporon sp. and Rhodotorula mucilaginosa, as detected in a high-throughput screening (5). Genomic DNA was isolated by first using lysozyme-based cell-wall digestion with a Wizard genomic DNA purification kit (Promega, Dübendorf, Switzerland). The genome was sequenced using single-molecule real-time sequencing cells on a PacBio RS II platform (Pacific Biosciences, Menlo Park, CA, USA) at the Functional Genomics Center Zurich (Zurich, Switzerland). In total, 94,382 reads, with a mean length of 12,974 bp resulting in $370 \times$ coverage, were assembled into a single contig and six plasmids using the Hierarchical Genome Assembly Process (6). The genome was automatically annotated using the NCBI Prokaryotic Genome Annotation Pipeline. The genome of L. plantarum RI-113 consists of a 3,462,990-bp circular molecule and comprises 67 tRNA genes and 16 rRNA genes. The G+C content of the genome is 44.34%, and a total of 3,361 protein-coding sequences were predicted.

Accession number(s). Sequence and annotation data of the complete *L. plantarum* strain RI-113 genome have been deposited at GenBank under the accession numbers CP017406 (genome) and CP017407 to CP017412 (six plasmids).

ACKNOWLEDGMENTS

AMERICAN SOCIETY FOR MICROBIOLOGY

This project was financed by the Swiss National Science Foundation with the National Research Program 69, project number 145214, and supported by the Foundation Hermann Herzer.

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Received 17 February 2017 Accepted 21 February 2017 Published 20 April 2017

Citation Inglin RC, Meile L, Klumpp J, Stevens MJA. 2017. Complete and assembled genome sequence of *Lactobacillus plantarum* RI-113 isolated from salami. Genome Announc 5: e00183-17. https://doi.org/10.1128/ genomeA.00183-17.

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