

	48h	0.43	0.47	0.33	0.43	0.48	0.99	0.42	0.43	0.44	0.99	0.51	0.75	0.40	0.71	0.43	1.15	0.51	0.57
<i>L. fusiformis</i> NFICC532		0.14	0.14	0.14	0.13	0.15	0.14	0.14	0.14	0.14	0.13	0.13	0.14	0.14	0.14	0.14	0.15	0.14	0.16
24h		0.36	0.35	0.38	0.38	0.42	0.52	0.39	0.35	0.35	0.48	0.41	0.74	0.35	0.50	0.38	0.67	0.37	0.53
48h		0.43	0.43	0.35	0.44	0.50	0.73	0.45	0.41	0.42	0.91	0.48	0.76	0.44	0.69	0.55	0.95	0.50	0.55
<i>L. sphaericus</i> NFICC871		0.14	0.14	0.14	0.14	0.15	0.14	0.13	0.13	0.13	0.14	0.13	0.14	0.14	0.15	0.14	0.14	0.13	0.16
24h		0.39	0.38	0.41	0.42	0.44	0.57	0.39	0.36	0.35	0.68	0.34	0.78	0.35	0.64	0.32	0.76	0.38	0.49
48h		0.47	0.37	0.34	0.47	0.50	0.90	0.43	0.44	0.44	1.03	0.41	0.96	0.26	0.85	0.28	1.01	0.38	0.41
<i>L. boronitolerans</i> NFICC879		0.11	0.12	0.12	0.12	0.13	0.12	0.11	0.12	0.12	0.12	0.12	0.12	0.11	0.12	0.12	0.11	0.11	0.14
24h		0.22	0.22	0.24	0.23	0.25	0.39	0.21	0.20	0.18	0.35	0.19	0.38	0.24	0.41	0.26	0.70	0.26	0.447
48h		0.09	0.19	0.19	0.09	0.15	0.09	0.08	0.09	0.11	0.27	0.19	0.42	0.22	0.34	0.20	0.53	0.24	0.33
<i>L. fusiformis</i> NFICC882		0.13	0.14	0.14	0.14	0.15	0.15	0.14	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.14	0.15	0.14	0.17
24h		0.39	0.32	0.35	0.37	0.42	0.58	0.33	0.35	0.38	0.61	0.35	0.50	0.35	0.56	0.30	0.67	0.35	0.57
48h		0.33	0.34	0.33	0.32	0.41	0.45	0.32	0.30	0.40	0.56	0.35	0.55	0.45	0.54	0.36	0.60	0.46	0.51
<i>L. boronitolerans</i> NFICC889		0.14	0.13	0.15	0.14	0.13	0.14	0.13	0.14	0.13	0.14	0.15	0.13	0.14	0.14	0.14	0.13	0.17	
24h		0.73	0.32	0.33	0.34	0.31	1.11	0.35	0.34	0.35	0.74	0.33	1.12	0.38	0.33	0.30	1.24	0.38	0.59
48h		1.23	0.32	0.42	0.35	0.34	1.27	0.34	0.35	0.36	1.22	0.35	1.05	0.42	0.36	0.34	1.27	0.46	0.65
<i>P. polymyxa</i> NFICC432		0.15	0.15	0.19	0.15	0.15	0.15	0.15	0.19	0.15	0.18	0.14	0.19	0.20	0.18	0.19	0.15	0.15	0.17
24h		0.29	0.25	0.22	0.25	0.26	0.26	0.27	0.26	0.26	0.40	0.25	0.20	0.21	0.19	0.20	0.58	0.20	0.38
48h		0.60	0.29	0.36	0.30	0.23	0.50	0.29	0.29	0.30	0.72	0.33	0.24	0.27	0.21	0.20	0.63	0.22	0.40

Table S2. Results of the dual-plate agar high-throughput screening. Complete inhibition of the spoilage bacteria is scored with 3, strong inhibition with 2, partial inhibition with 1, and no inhibition with 0.

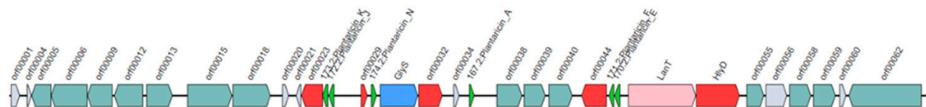
Table S3. Results of the complete API test profile after 48 hours of incubation at 30 °C

48 Hours	<i>F. sanfranciscensis</i>	<i>L. plantarum</i>	<i>F. rossiae</i>	<i>P. pentosaceus</i>	<i>Lc. citreum</i>	<i>P. pentosaceus</i>	<i>L. plantarum</i>	<i>L. plantarum</i>	<i>Lc. citreum</i>	<i>L. plantarum</i>	<i>L. plantarum</i>	<i>Lc. citreum</i>	<i>Lc. citreum</i>	<i>P. pentosaceus</i>	<i>P. pentosaceus</i>	<i>L. plantarum</i>	<i>L. plantarum</i>	<i>P. pentosaceus</i>
30°C	UMCC 2990	UMCC 2996	UMCC 3002	UMCC 3010	NFICC 3011	NFICC 10	NFICC 19	NFICC 27	NFICC 28	NFICC 58	NFICC 72	NFICC 87	NFICC 94	NFICC 103	NFICC 163	NFICC 207	NFICC 293	NFICC 341
Control (negative)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycerol	-	-	-	-	-	+/-	-	-	+/-	-	-	-	-	+/-	-	-	-	-
Erythritol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D(-)-Arabinose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L(+)-Arabinose	+	+	+	+	+	+	+	-	-	+	+	-	+	+	+	-	+	+
Ribose	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	+
D(+)Xylose	-	-	+	-	+	-	-	-	+	+	-	+	+	-	+/-	+	-	+/-
L(-)-Xylose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adonitol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-Methylxyloside	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
Galactose	+	+	+/-	+	+/-	+	+	+	+	+	+	-	-	+	+	+	+	+
D(+)Glcucose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
D(-)-Fructose	+	+	+/-	+	+/-	+	+	+	+	+	+	+	+	+	+	+	+	+
D(+)Mannose	+	+	+/-	+	+/-	+	+	+	+	+	+	+	+	+	+	+	+	+
L(-)-Sorbose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhamnose	+/-	-	-	+/-	-	+/-	-	-	+/-	-	-	-	-	+/-	-	-	+/-	-
Dulcitol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
meso-Inositol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mannitol	-	+	-	-	+/-	+	+	+	+	+	+	+	+/-	+/-	+	+	+	+

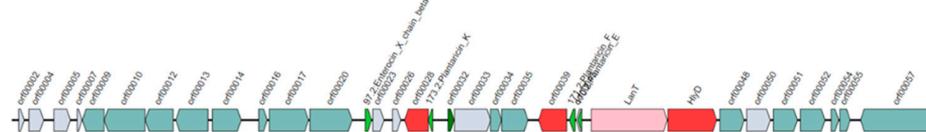
Sorbitol	-	+	-	-	-	+	+	+	+	+	+	+	-	-	+	+	+	+	+
alfa-Methyl-p-mannoside	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
alfa-Methyl-D-glucoside	-	-	-	-	-	+/-	-	-	+/-	-	-	+	+	-	-	-	-	-	-
N-acetyl-glucosamine	+	+	+/-	+	+/-	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Amygdalin	+	+	-	+	-	+	+	+	+	+	+	+	-	-	+	+	+	+	+
Arbutine	+	+	-	+	-	+	+	+	+	+	+	+	-	-	+	+	+	+	+
Esculetine	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salicine	+	+	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+
D(+)-cellobiose	+	+	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Maltose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lactose	-	+	-	-	-	+	+	+	+	+	+	+	-	-	+	+	+	+	+
D(+)-Melibiose	-	+	+/-	-	-	+	+	+	+	+	+	+	-	-	+	+	+	+	+
Saccharose	-	+	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+
D(-)-Trehalose	+	+	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inulin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Melezitose	-	+	-	-	-	+	+	+	+	+	+	+	-	-	+	+	+	+	+
D(+)-Raffinose	-	+	-	-	-	+	+	+	+	+	+	+	-	-	+/-	+	+	+	+
Starch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycogene	-	+/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylitol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-Gentiobiose	+/-	+	-	+	-	+	+	+	+	+	+	+	+/-	+	+	+	+	+/-	+

D-Turanose	-	+	-	-	-	+	-	-	+	+	-	+	+	-	-	+	+	-
D-Lyxose	-	-	+	-	+	+	-	-	+/-	+	-	-	-	-	-	-	-	-
D-Tagatose	+	-	-	+	-	-	-	-	+	+	-	-	-	+	-	-	-	-
D-Fucose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-Fucose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D-Arabinol	-	+/-	-	-	-	+/-	+	+/-	+/-	+/-	+	-	-	+	+/-	-	+/-	+/-
L-Arabinol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gluconate	-	+/-	+/-	-	+/-	+	+	+	+	+/-	+	+/-	+	+	+	+/-	+/-	+
+--ceto- gluconate	-	-	-	+/-	-	-	-	-	+/-	-	-	+/-	+/-	+	-	-	-	-
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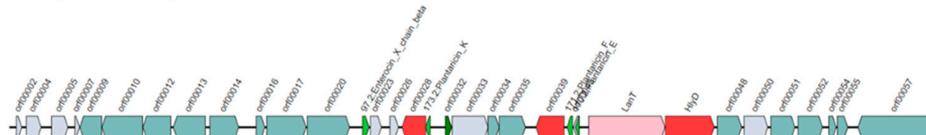
Lactiplantibacillus plantarum UMCC2996



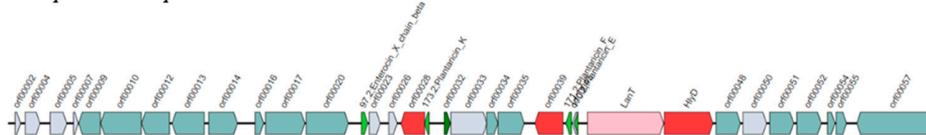
Lactiplantibacillus plantarum NFICC19



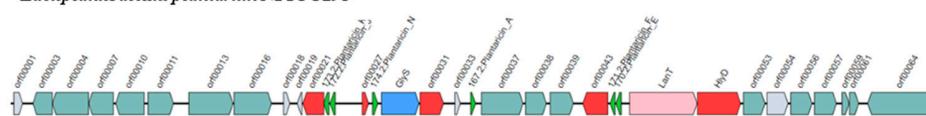
Lactiplantibacillus plantarum NFICC72



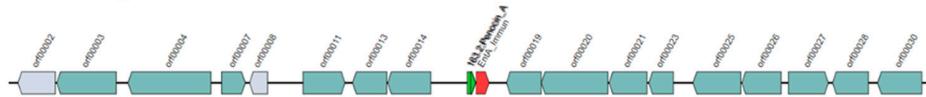
Lactiplantibacillus plantarum NFICC163



Lactiplantibacillus plantarum NFICC293



Pediococcus pentosaceus NFICC10



Legend: □ No function determined ■ Blast hit with UniRef90 ■ Core Peptide ■ Modification ■ Immunity / Transport ■ Transport & Leader cleavage

Figure S1. Gene encoding for bacteriocins detected in the genome of the best candidate strains