

Table S1. Genomic characteristics of *Lactobacillus plantarum* strains.

Strain no.	Source	Accession no.	Genome size (bp)	G+C content (%)	No. of contigs	No. of CDS
10CH	Cheese	GCA_002005385.2	3,311,056	44.5	1	3,079
AS-10	Fruits and vegetables	GCA_003045645.1	3,022,969	44.8	1	2,853
ATCC 15578	Brewery	GCA_002900075.1	3,473,609	44.1	27	3,319
ATCC 202195	Human	GCA_004354995.1	3,327,225	44.3	20	3,139
ATCC 8014	—	GCA_002749655.1	3,309,473	44.5	5	3,109
ATG-K8	Kimchi	GCA_003597615.1	3,275,764	44.5	2	3,066
BLS41	Kimchi	GCA_002116955.1	3,476,011	44.2	6	3,289
b-2	Pickle	GCA_003352125.1	3,211,268	44.8	1	3,039
CCFM605	Yogurt-like dairy product	GCA_003344825.1	3,314,628	44.4	55	3,167
CGMCC 1.557	—	GCA_001272315.2	3,273,239	44.4	3	3,104
CGMCC 12436	Yogurt-like dairy product	GCA_003344845.1	3,259,936	44.5	53	3,046
CIP 104448	Human stool	GCA_000956195.1	3,237,330	44.4	178	3,043
CECT 8962	—	GCA_900289155.1	3,290,117	44.3	136	3,106
CECT 8963	—	GCA_900290135.1	3,248,428	44.4	136	3,062
CECT 8964	—	GCA_900290105.1	3,247,322	44.4	173	3,033
CECT 8965	—	GCA_900290125.1	3,342,151	44.3	152	3,144
CECT 8966	—	GCA_900290085.1	3,295,692	44.3	161	3,093
CECT 9492	Chenopodium quinoa seeds	GCA_900695295.1	3,343,723	44.2	63	3,153
DS11_9	Commercial dietary supplements	GCA_003061805.1	3,208,332	44.5	25	2,998
DS13_9	Commercial dietary supplements	GCA_003053185.1	3,112,570	44.7	32	2,913
DS23_9	Commercial dietary supplements	GCA_003053045.1	3,204,801	44.5	38	3,991
DS3_9	Commercial dietary supplements	GCA_003053165.1	3,231,607	44.5	36	3,027
DS6_9	Commercial dietary supplements	GCA_003061725.1	3,215,836	44.5	71	3,001
DS8_9	Commercial dietary supplements	GCA_003053025.1	3,113,711	44.7	27	2,910
DSM 20174 ^T	Pickled cabbage	NZ_CP039121.1	3,250,154	44.5	2	3,032
FBL-3a	Beef cattle	GCA_003999275.1	3,232,240	44.6	1	3,045
HFC8	Faecal	GCA_001302645.1	3,405,709	44.3	11	3,370
IDCC3501	Kimchi	GCA_003428355.1	3,242,652	44.5	1	3,022
JBE245	Meju	GCA_001596095.1	3,262,611	44.5	1	3,056
JDM1	—	GCA_000023085.1	3,197,759	44.7	1	2,985
KACC 92189	—	GCA_003692595.1	3,460,294	44.3	5	3,270
KC28	Kimchi	GCA_002948215.1	3,291,849	44.5	1	3,118
K259	Kimchi	GCA_002868775.1	3,373,076	44.5	2	3,175
LM1004	Kimchi	GCA_002895245.1	3,198,690	44.6	1	3,006
LMG S 29189	—	GCA_002914965.1	3,200,023	44.5	19	2,996
LP1145	Fermented vegetables	This study	3,250,380	44.5	2	3,032
LP2	Pickles	GCA_002109425.1	3,284,622	44.5	1	3,082
LP3	Commercial dietary supplements	GCA_002286275.1	3,329,954	44.4	3	3,103
LPL-1	Fermented fish	GCA_002205775.2	3,200,572	44.6	2	3,006
LY-78	Fermented chinese cabbage	GCA_001715615.1	3,128,783	44.6	2	2,926
LZ95	Baby stool	GCA_001484005.1	3,322,458	44.5	3	3,126
NCIMB 700965	Cheese	GCA_003611015.1	3,216,285	44.5	6	3,207
PC520	Chinese fermented food-pickles	GCA_002576835.1	3,452,904	44.3	3	3,286
PS128	Fu-tsai	GCA_001005805.1	3,325,806	44.6	11	3,087
Q7	Yak fermented milk	GCA_003999605.1	2,981,934	44.6	5	2,809
SK151	Kimchi	GCA_003269405.1	3,231,249	44.6	1	2,997
TMW 1.1478	Honey	GCA_003345375.1	3,387,168	44.3	2	3,198

TS12	Stinky Tofu	GCA 001908455.1	3,433,628	44.3	7	3,379
UNQLp11	Pinot noir wine	GCA 004730965.1	3,534,932	44.2	1	3,413
ZJ316	Healthy newborn fecal sample	GCA 000338115.2	3,299,755	44.5	4	3,138
ZS2058	sauerkraut	GCA 001296095.1	3,198,337	44.7	1	2,958
5-2	Fermented soybean	GCA 001278015.1	3,237,652	44.7	1	3,034

Table S2. Discriminated loci between *Lactobacillus plantarum* LP1145 and DSM 20174^T.

Locus no.	Gene	Annotation	Length (bp)	Position (SNP)	Insertion/Deletion (nucleotide sequence)
—	—	IS1182 family transposase*	1655	11(G/A), 87(C/A), 1473(A/T), 1477(T/C), 1590(G/A), 1597(C/A), 1621(G/A)	Ins (C)
2	—	major facilitator superfamily transporter	1455	278(C/T)	
3	—	IS1182 family transposase*	1851	478(A/G)	
4	—	sigma-54-dependent transcriptional regulator	2850	2444(A/C)	
5	—	IS1182 family transposase*	1701	224(G/A), 498(C/T), 982(A/G), 1196(G/A), 1309(A/G)	
6	guaA	Glutamine -hydrolyzing GMP synthase	1557	889(T/G)	
—	—	MarR family transcriptional regulator	477	264(T/G)	
7	—	Cna B-type domain-containing protein	2958		Del (TGCTACTGCTAC)
8	ccpA_2	Catabolite control protein A	1011	954(A/C)	
9	—	NAD(P)/FAD-dependent oxidoreductase	1203	805(C/A)	
10	—	gamma-D-glutamyl-meso-diaminopimelate peptidase	789	339(T/C)	
11	—	DUF5011 domain-containing protein	3347	218(C/T), 290(T/C), 314(T/C), 401(T/C), 425(C/T), 2340(G/A), 2488(A/G), 2492(T/C), 2559(T/C), 2590(G/A), 2690(T/C), 2728(A/G), 2820(A/G), 3311(C/T), 3312(A/C)	Del (AACCAGTAGTG-CAGCGAACAGTGT)

*multicopy gene.