

**Table S1.** PCR primers used in quantitative Real-Time PCR assay

Gene	Forward Primer	Reverse Primer
COX-1	CTCCGGTTCTTGCTGTTCT	GTCACACTGGTAGCGGTCAA
COX-2	CAAATTGCTGGCAGGGTTGC	AGGGCTTCAGCATAAAGCGT
GAPDH	AGACACCATGGGGAAGGTGA	TGGAATTTGCCATGGGTGGA
IL-8	TTTTGCCAAGGAGTGCTAAAGA	AACCCTCTGCACCCAGTTTTTC
IL-10	GACTTTAAGGGTTACCTGGGTTG	TCACATGCGCCTTGATGTCTG

**Table S2.** Antibiotic susceptibility measured by Etest method and expressed as percentage (%)

Species	%	AMP	VA	GEN	KAN	STRE	ERY	CLIN	TC	CAP
<i>L. plantarum</i> (n=30)	R	0	nr	0	0	nr	0	0	0	0
	S	100	nr	100	100	nr	100	100	100	100
<i>P. pentosaceus</i> (n=27)	R	0	nr	0	0	18.5	0	0	0	0
	S	100	nr	100	100	81.5	100	100	100	100
<i>L. rhamnosus</i> (n=19)	R	0	nr	0	0	0	0	0	0	0
	S	100	nr	100	100	100	100	100	100	100
<i>L. pentosus</i> (n=17)	R	0	nr	0	0	nr	0	0	0	0
	S	100	nr	100	100	nr	100	100	100	100
<i>L. paracasei</i> (n=15)	R	0	nr	0	0	0	0	0	0	0
	S	100	nr	100	100	100	100	100	100	100
<i>Leuc. lactis</i> (n=4)	R	0	nr	0	50	0	0	0	0	0
	S	100	nr	100	50	100	100	100	100	100
% of resistance (R)		0	nr	0	1.8	4.5	0	0	0	0
% of susceptibility (S)		100	nr	100	98.2	95.5	100	100	100	100

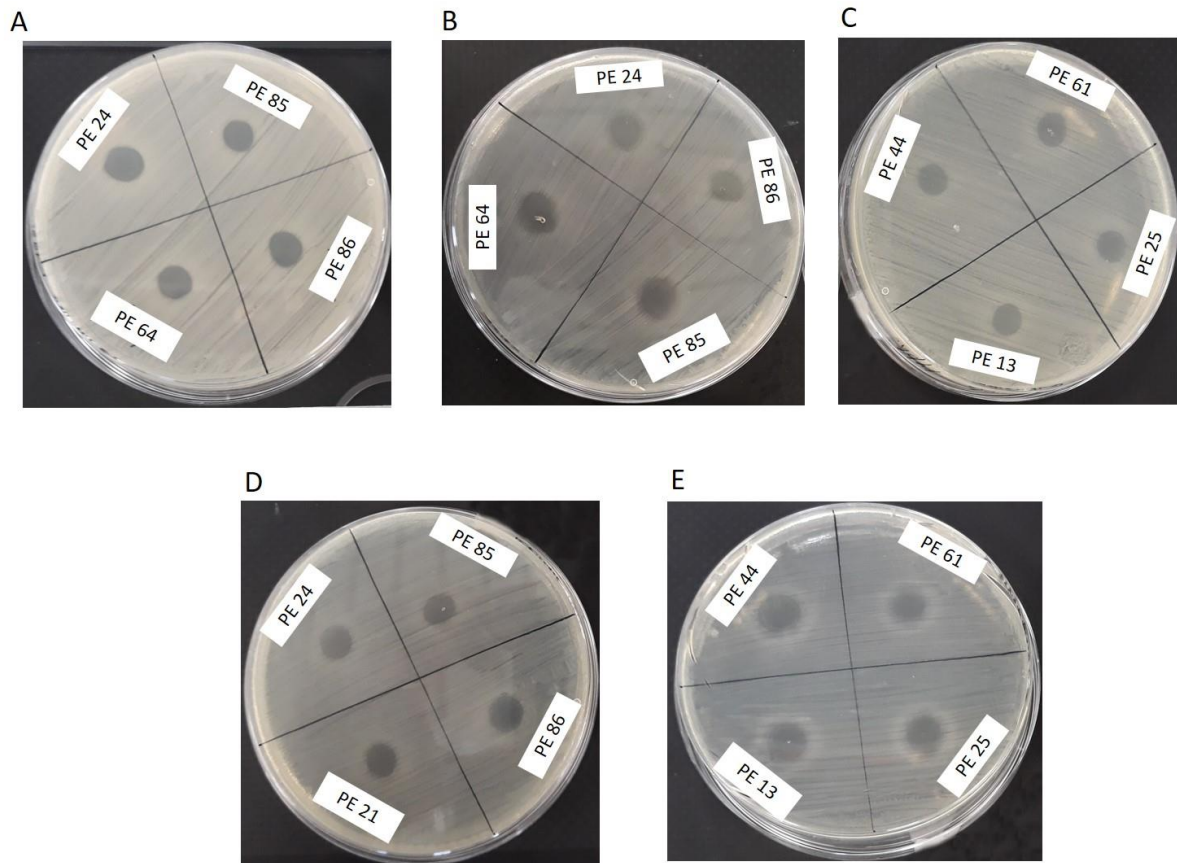
Legend: R (resistant), S (susceptible), nr (not required) according to EFSA 2012.

AMP, ampicillin; VA, vancomycin; GEN, gentamycin; KAN, kanamycin; STRE, streptomycin; EY, erythromycin; CLIN, clindamycin; TC, tetracycline; CAP, chloramphenicol.

**Table S3.** Virulence factors genes and antibiotic resistance related genes.

Target genes	Tested strains					
	PE24	PE25	PE44	PE61	PE85	PE86
<i>gelE</i>	-	-	-	-	-	-
<i>hyl</i>	-	-	-	-	-	-
<i>asa1</i>	-	-	-	-	-	-
<i>esp</i>	-	-	-	-	-	-
<i>cylA</i>	-	-	-	-	-	-
<i>efaA</i>	-	-	-	-	-	-
<i>ace</i>	-	-	-	-	-	-
<i>ermA</i>	-	-	-	-	-	-
<i>ermB</i>	-	-	-	-	-	-
<i>ermC</i>	-	-	-	-	-	-
<i>tetK</i>	-	-	-	-	-	-
<i>tetL</i>	-	-	-	-	-	-
<i>tetM,</i>	-	-	-	-	-	-
<i>tetO</i>	-	-	-	-	-	-
<i>tetS</i>	-	-	-	-	-	-
<i>aac(6')-Ie-aph(2'')-Ia</i>	-	-	-	-	-	-
<i>catA</i>	-	-	-	-	-	-
<i>aph(3')-IIIa</i>	-	-	-	-	-	-
<i>ant(4')-Ia</i>	-	-	-	-	-	-
<i>aph(2'')-Id</i>	-	-	-	-	-	-
<i>aph(2'')-Ic</i>	-	-	-	-	-	-
<i>aph(2'')-Ib</i>	-	-	-	-	-	-
<i>ant(6)-Ia</i>	-	-	-	-	-	-

(+) presence, (-) absence of virulence factors genes and antibiotic resistance related genes.



**Figure S1.** Antagonistic activity of some LAB isolates against *Escherichia coli* ATCC 25922 (A and E panels), *Salmonella enterica* serovar *typhimurium* ATCC 14028 (panel B), *Staphylococcus aureus* ATCC 6538 (panel C), and *Listeria monocytogenes* DSM 12464 (panel D).



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