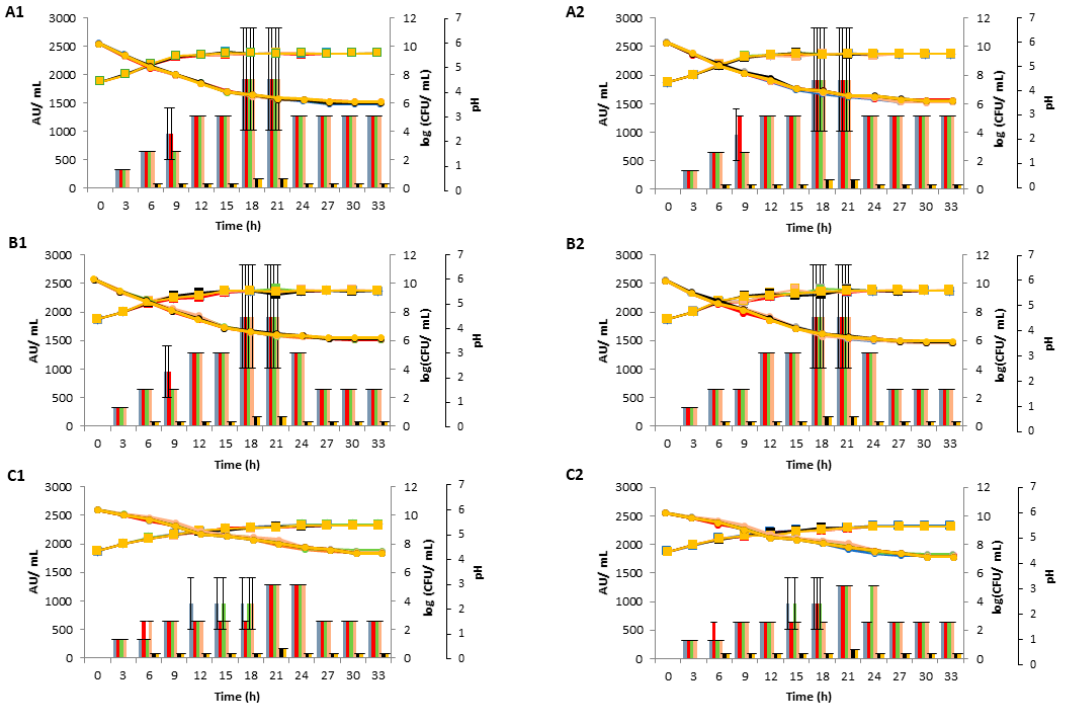

Figure S1. Growth expressed in log (CFU/ mL) (■), pH reduction (●) and plantaricin activity expressed in AU/ mL (bars) of 6 *Lp. plantarum* strains, after incubation in MRS broth adjusted to initial pH 6, at 30 (A), 37 (B) and 20 °C (C), over a period of 33 h. The effect of NaCl concentration (0 and 1.8 %) is indicated by numbers, namely 1 and 2, respectively. The 6 *Lp. plantarum* strains, namely LQC 2441, 2422, 2516, 2485, 2320 and 2520 correspond to blue, red, green, pink, black and orange color, respectively.

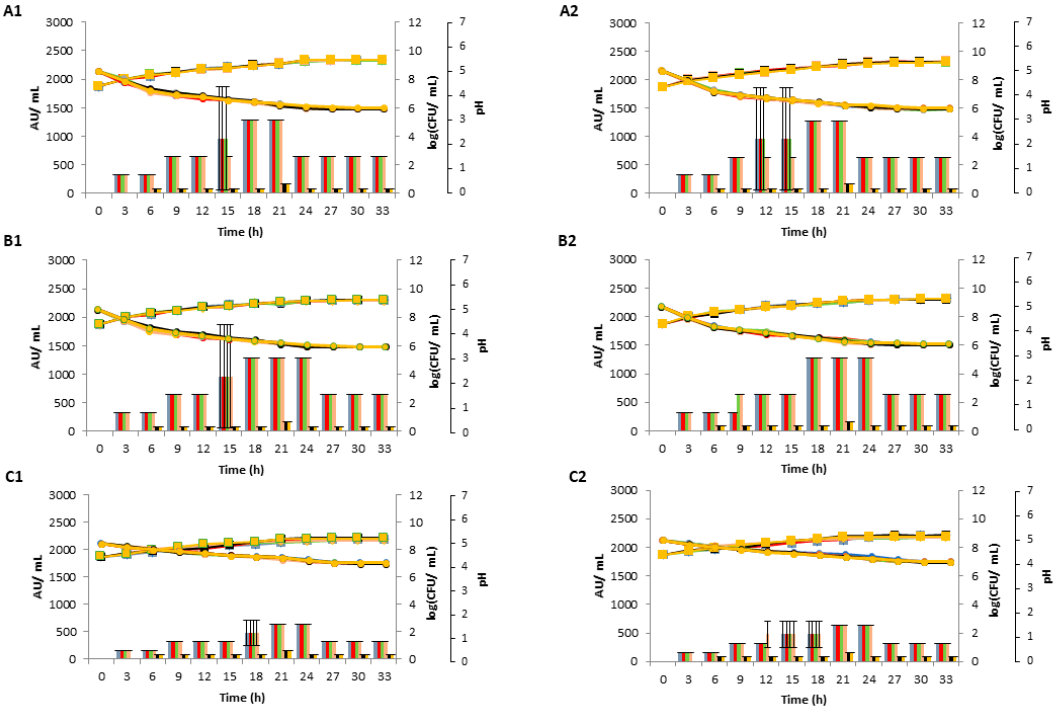

Figure S2. Growth expressed in log (CFU/ mL) (■), pH reduction (●) and plantaricin activity expressed in AU/ mL (bars) of 6 *Lp. plantarum* strains, after incubation in MRS broth adjusted to initial pH 5, at 30 (A), 37 (B) and 20 °C (C), over a period of 33 h. The effect of NaCl concentration (0 and 1.8 %) is indicated by numbers, namely 1 and 2, respectively. The 6 *Lp. plantarum* strains, namely LQC 2441, 2422, 2516, 2485, 2320 and 2520 correspond to blue, red, green, pink, black and orange color, respectively.

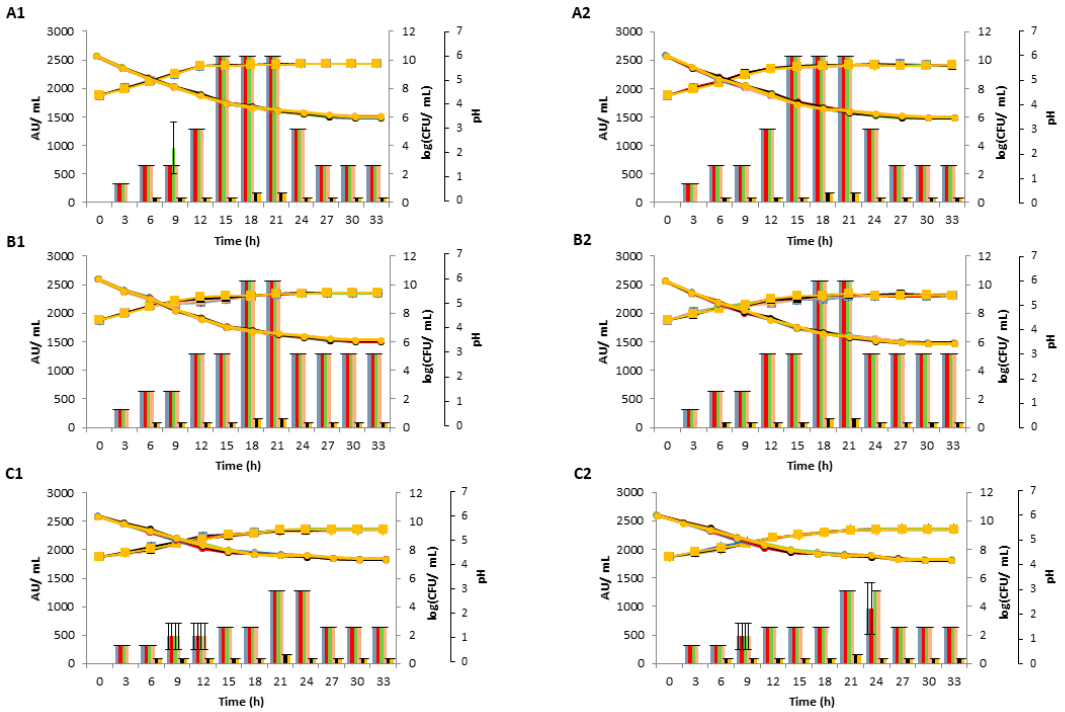

Figure S3. Growth expressed in log (CFU/ mL) (■), pH reduction (●) and plantaricin activity expressed in AU/ mL (bars) of 6 *Lp. plantarum* strains, after incubation in mMRS broth adjusted to initial pH 6, at 30 (A), 37 (B) and 20 °C (C), over a period of 33 h. The effect of NaCl concentration (0 and 1.8 %) is indicated by numbers, namely 1 and 2, respectively. The 6 *Lp. plantarum* strains, namely LQC 2441, 2422, 2516, 2485, 2320 and 2520 correspond to blue, red, green, pink, black and orange color, respectively.

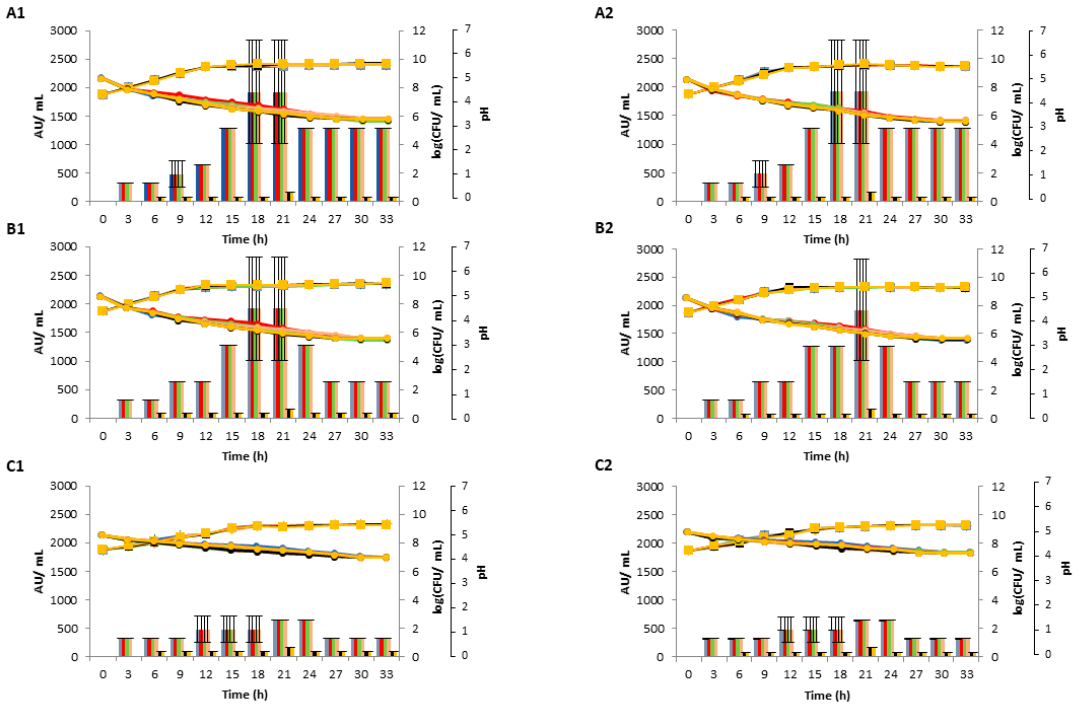

Figure S4. Growth expressed in log (CFU/ mL) (■), pH reduction (●) and plantaricin activity expressed in AU/ mL (bars) of 6 *Lp. plantarum* strains, after incubation in mMRS broth adjusted to initial pH 5, at 30 (A), 37 (B) and 20 °C (C), over a period of 33 h. The effect of NaCl concentration (0 and 1.8 %) is indicated by numbers, namely 1 and 2, respectively. The 6 *Lp. plantarum* strains, namely LQC 2441, 2422, 2516, 2485, 2320 and 2520 correspond to blue, red, green, pink, black and orange color, respectively.

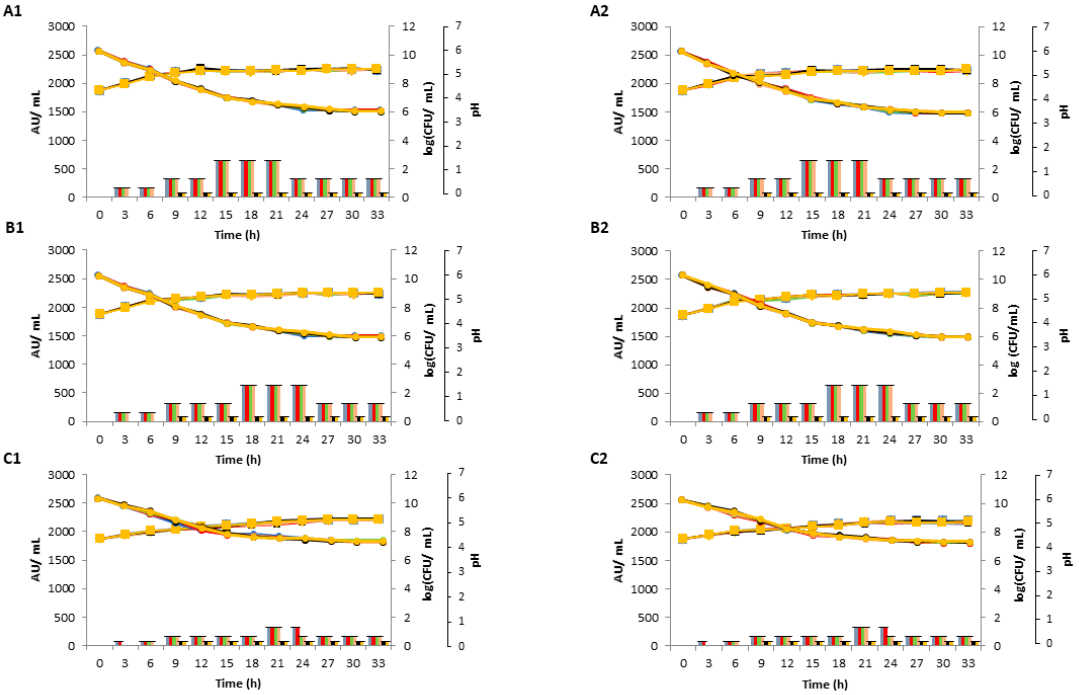

Figure S5. Growth expressed in log (CFU/ mL) (■), pH reduction (●) and plantaricin activity expressed in AU/ mL (bars) of 6 *Lp. plantarum* strains, after incubation in WFE broth adjusted to initial pH 6, at 30 (A), 37 (B) and 20 °C (C), over a period of 33 h. The effect of NaCl concentration (0 and 1.8 %) is indicated by numbers, namely 1 and 2, respectively. The 6 *Lp. plantarum* strains, namely LQC 2441, 2422, 2516, 2485, 2320 and 2520 correspond to blue, red, green, pink, black and orange color, respectively.

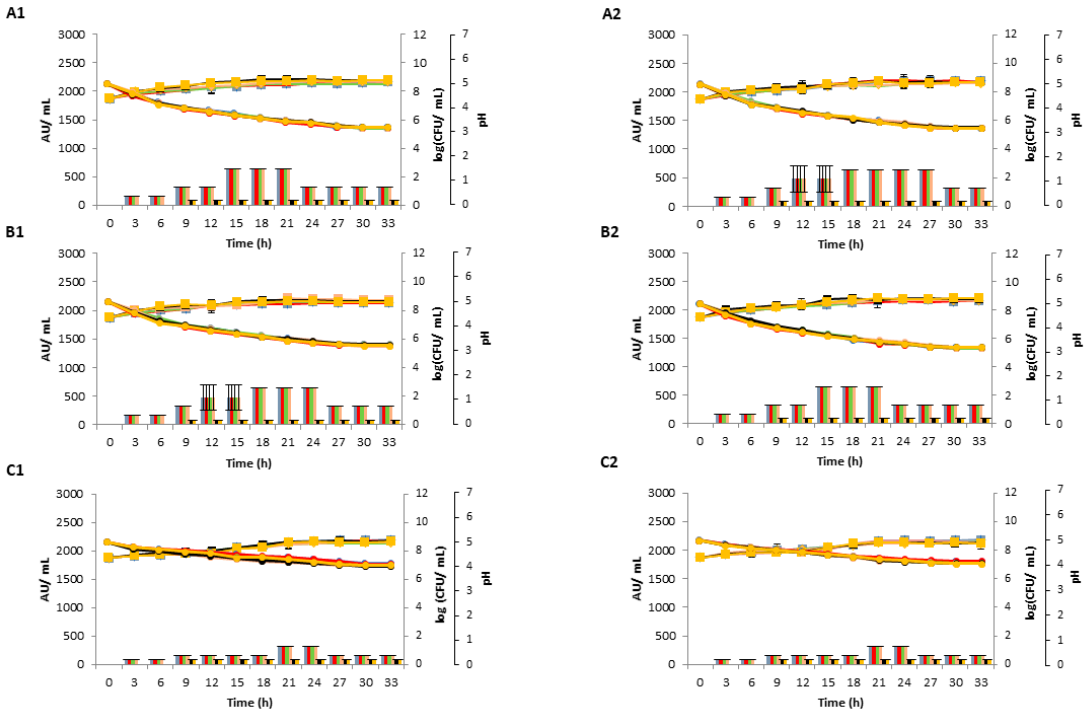

Figure S6. Growth expressed in log (CFU/ mL) (■), pH reduction (●) and plantaricin activity expressed in AU/ mL (bars) of 6 *Lp. plantarum* strains, after incubation in WFE broth adjusted to initial pH 5, at 30 (A), 37 (B) and 20 °C (C), over a period of 33 h. The effect of NaCl concentration (0 and 1.8 %) is indicated by numbers, namely 1 and 2, respectively. The 6 *Lp. plantarum* strains, namely LQC 2441, 2422, 2516, 2485, 2320 and 2520 correspond to blue, red, green, pink, black and orange color, respectively.

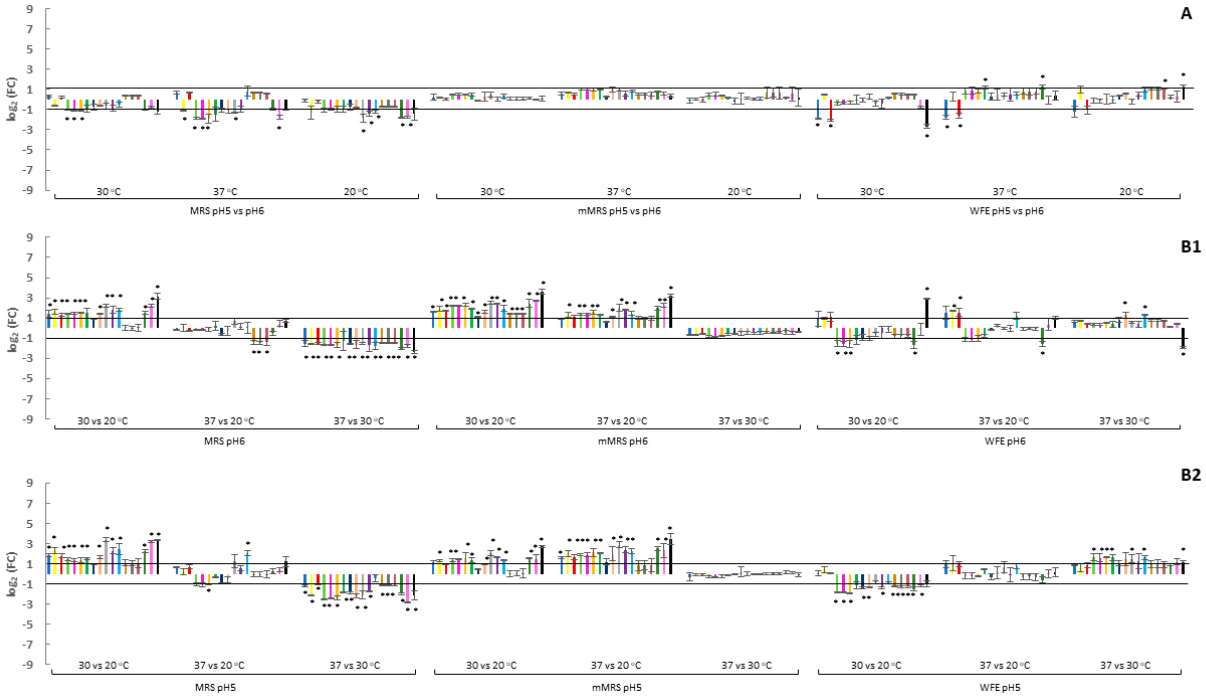

Figure S7. (A) Effect of pH decrease, namely from 6 to 5, on the relative transcription of *plNC8a*, *plNC8b*, *plNC8c*, *plnL*, *plnR*, *plnK*, *plnJ*, *plnE*, *plnF*, *plnH*, *plnS*, *plnY*, *plNC8-IF*, *plNC8-HK*, *plnD*, *plnI*, *plnM* and *plnG*, during growth of *Lp. plantarum* strain LQC 2320 in MRS, mMRS broth and WFE, at 30, 37 and 20 °C, for 21 h. Growth at pH 6 was used as control. (B1) Effect of temperature increase, namely from 20 to 30 and 37 °C, on the relative transcription of the aforementioned genes, during growth of *Lp. plantarum* strain LQC 2320 in MRS, mMRS broth and WFE, at initial pH 6, for 21 h. The lowest temperature was used as control. (B2) Effect of temperature increase on the relative gene transcription, during growth of *Lp. plantarum* strain LQC 2320 in MRS, mMRS broth and WFE, at initial pH 5, for 21 h. The lowest temperature was used as control. If visible, blue, yellow, red, light green, fuchsia, orange, green, dark blue, khaki, light gray, purple, tyrquoise, gold, gray, dark red, dark green, pink and black bars correspond to *plNC8a*, *plNC8b*, *plNC8c*, *plnL*, *plnR*, *plnK*, *plnJ*, *plnE*, *plnF*, *plnH*, *plnS*, *plnY*, *plNC8-IF*, *plNC8-HK*, *plnD*, *plnI*, *plnM* and *plnG*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

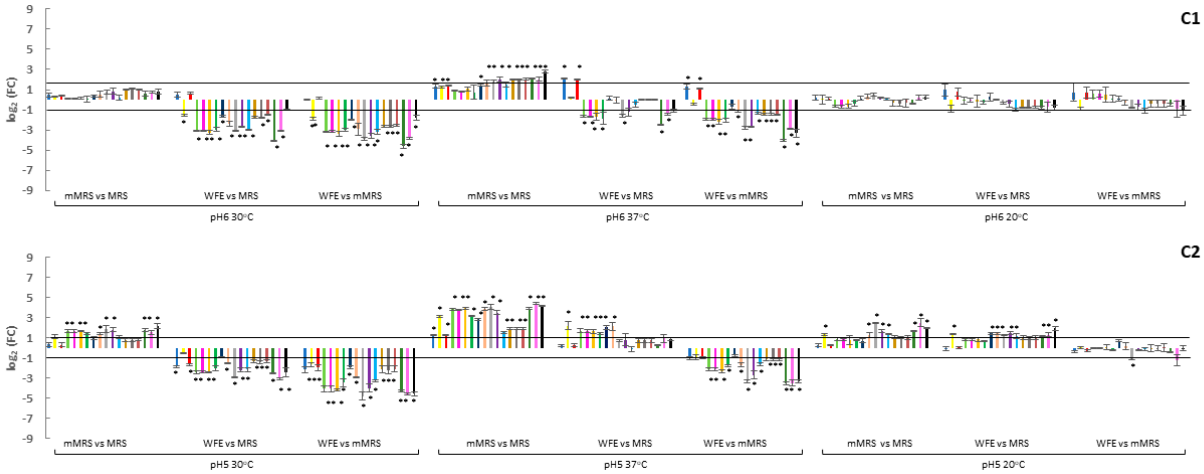

Figure S8. (C1) Effect of substrate on the relative transcription of *plNC8a, plNC8b, plNC8c, plnL, plnR, plnK, plnJ, plnE, plnF, plnH, plnS, plnY, plNC8-IF, plNC8-HK, plnD, plnI, plnM* and *plnG*, during growth of *Lp. plantarum* strain LQC 2320 in MRS, mMRS broth and WFE at initial pH 6, at 30, 37 and 20 °C, for 21 h, using MRS broth as control. In the comparison between WFE and mMRS broth, the latter was used as control. (C2) Effect of substrate on the relative transcription of the plantaricin genes at the aforementioned conditions, at initial pH 5. If visible, blue, yellow, red, light green, fuchsia, orange, green, dark blue, khaki, light gray, purple, tyrquoise, gold, gray, dark red, dark green, pink and black bars correspond to *plNC8a, plNC8b, plNC8c, plnL, plnR, plnK, plnJ, plnE, plnF, plnH, plnS, plnY, plNC8-IF, plNC8-HK, plnD, plnI, plnM* and *plnG*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

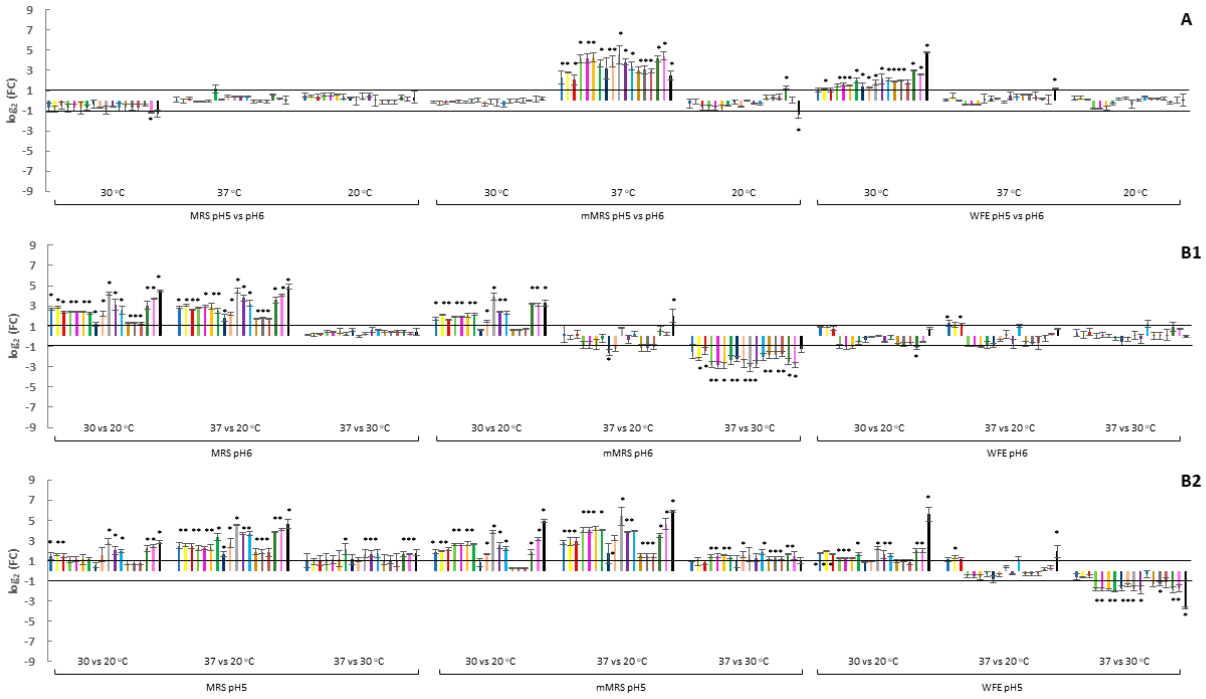

Figure S9. (A) Effect of pH decrease, namely from 6 to 5, on the relative transcription of *plNC8a*, *plNC8b*, *plNC8c*, *plnL*, *plnR*, *plnK*, *plnJ*, *plnE*, *plnF*, *plnH*, *plnS*, *plnY*, *plNC8-IF*, *plNC8-HK*, *plnD*, *plnI*, *plnM* and *plnG*, during growth of *Lp. plantarum* strain LQC 2520 in MRS, mMRS broth and WFE, at 30, 37 and 20 °C, for 21 h. Growth at pH 6 was used as control. (B1) Effect of temperature increase, namely from 20 to 30 and 37 °C, on the relative transcription of the aforementioned genes, during growth of *Lp. plantarum* strain LQC 2520 in MRS, mMRS broth and WFE, at initial pH 6, for 21 h. The lowest temperature was used as control. (B2) Effect of temperature increase on the relative gene transcription, during growth of *Lp. plantarum* strain LQC 2520 in MRS, mMRS broth and WFE, at initial pH 5, for 21 h. The lowest temperature was used as control. If visible, blue, yellow, red, light green, fuchsia, orange, green, dark blue, khaki, light gray, purple, tyrquoise, gold, gray, dark red, dark green, pink and black bars correspond to *plNC8a*, *plNC8b*, *plNC8c*, *plnL*, *plnR*, *plnK*, *plnJ*, *plnE*, *plnF*, *plnH*, *plnS*, *plnY*, *plNC8-IF*, *plNC8-HK*, *plnD*, *plnI*, *plnM* and *plnG*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

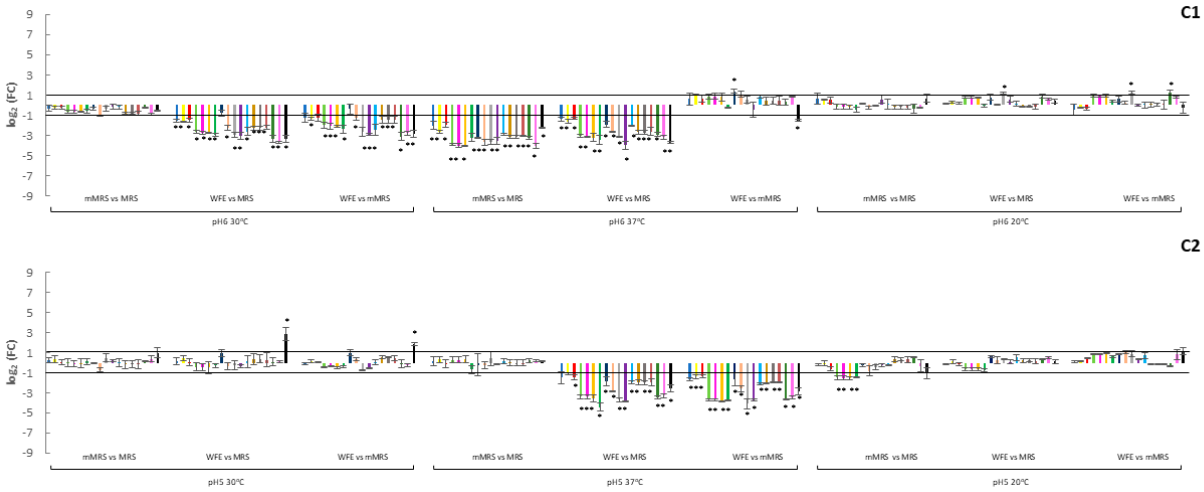

Figure S10. (C1) Effect of substrate on the relative transcription of *plNC8a*, *plNC8b*, *plNC8c*, *plnL*, *plnR*, *plnK*, *plnJ*, *plnE*, *plnF*, *plnH*, *plnS*, *plnY*, *plNC8-IF*, *plNC8-HK*, *plnD*, *plnI*, *plnM* and *plnG*, during growth of *Lp. plantarum* strain LQC 2520 in MRS, mMRS broth and WFE at initial pH 6, at 30, 37 and 20 °C, for 21 h, using MRS broth as control. In the comparison between WFE and mMRS broth, the latter was used as control. (C2) Effect of substrate on the relative transcription of the plantaricin genes at the aforementioned conditions, at initial pH 5. If visible, blue, yellow, red, light green, fuchsia, orange, green, dark blue, khaki, light gray, purple, tyrquoise, gold, gray, dark red, dark green, pink and black bars correspond to *plNC8a*, *plNC8b*, *plNC8c*, *plnL*, *plnR*, *plnK*, *plnJ*, *plnE*, *plnF*, *plnH*, *plnS*, *plnY*, *plNC8-IF*, *plNC8-HK*, *plnD*, *plnI*, *plnM* and *plnG*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

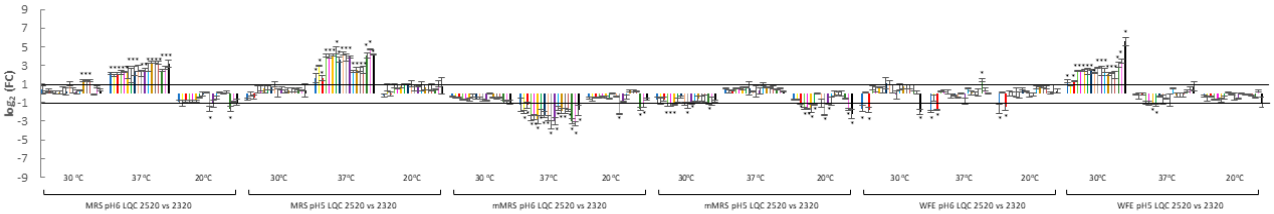

Figure S11. Effect of strain on the relative transcription of *plNC8a*, *plNC8b*, *plNC8c*, *plnL*, *plnR*, *plnK*, *plnJ*, *plnE*, *plnF*, *plnH*, *plnS*, *plnY*, *plNC8-IF*, *plNC8-HK*, *plnD*, *plnI*, *plnM* and *plnG*, was obtained by comparing the transcription of the aforementioned genes after growth of *Lp. plantarum* strains LQC 2320 and 2520 in MRS, mMRS broth and WFE, both at pH 5 and pH 6, at 30, 37 and 20 °C, for 21 h, using LQC 2320 as control. If visible, blue, yellow, red, light green, fuchsia, orange, green, dark blue, khaki, light gray, purple, tyrquoise, gold, gray, dark red, dark green, pink and black bars correspond to *plNC8a*, *plNC8b*, *plNC8c*, *plnL*, *plnR*, *plnK*, *plnJ*, *plnE*, *plnF*, *plnH*, *plnS*, *plnY*, *plNC8-IF*, *plNC8-HK*, *plnD*, *plnI*, *plnM* and *plnG*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

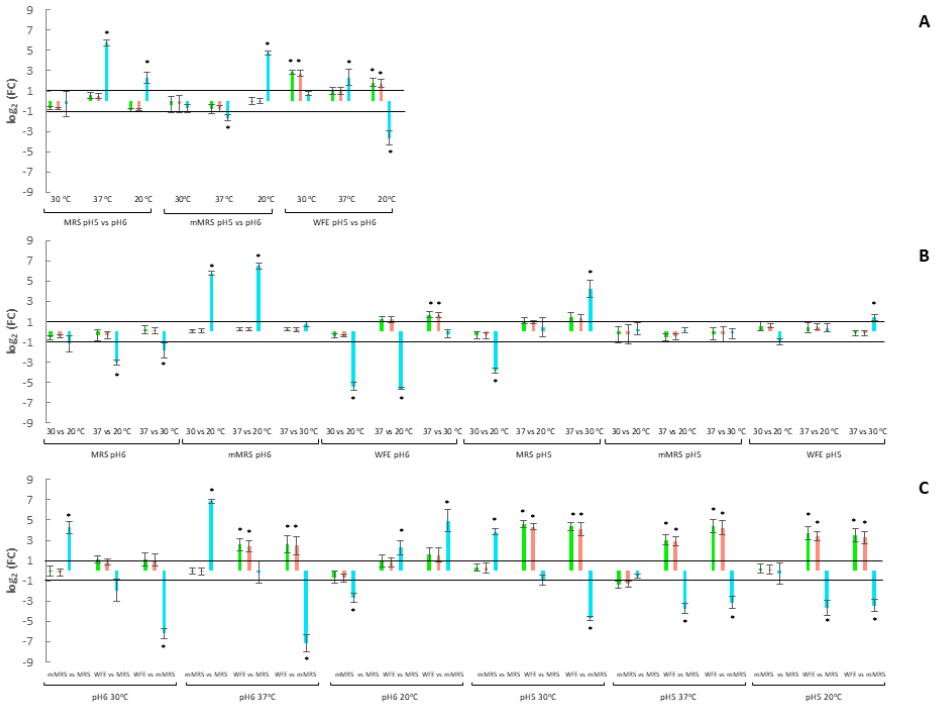

Figure S12. (A) Effect of pH decrease, namely from 6 to 5, on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of *Lp. plantarum* strain LQC 2441 in MRS, mMRS broth and WFE, at 30, 37 and 20 °C, for 21 h. Growth at pH 6 was used as control. (B) Effect of temperature increase, namely from 20 to 30 and 37 °C, on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of strain LQC 2441 in MRS, mMRS broth and WFE, both at initial pH 6 and pH 5, for 21 h. The lowest temperature was used as control. (C) Effect of substrate on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of strain LQC 2441 in MRS, mMRS broth and WFE, both at initial pH 6 and pH 5, at 30, 37 and 20 °C, for 21 h, using MRS broth as control. In the comparison between WFE and mMRS broth, the latter was used as control. If visible, lime, coral and aquamarine bars correspond to *pln423* (*plαA), plαB* and *plαD*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

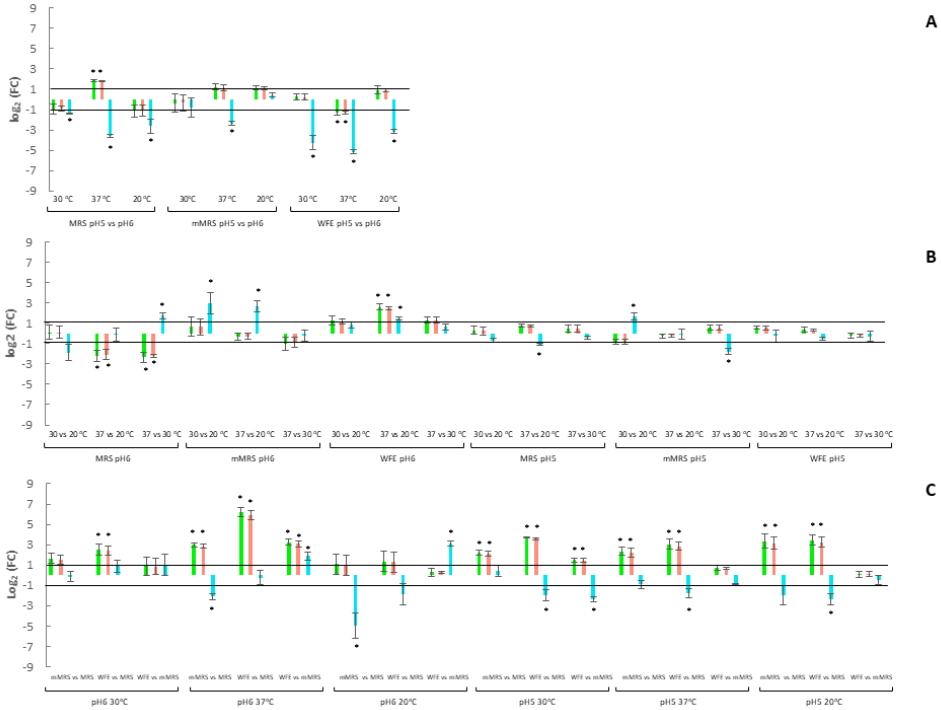

Figure S13. (A) Effect of pH decrease, namely from 6 to 5, on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of *Lp. plantarum* strain LQC 2422 in MRS, mMRS broth and WFE, at 30, 37 and 20 °C, for 21 h. Growth at pH 6 was used as control. (B) Effect of temperature increase, namely from 20 to 30 and 37 °C, on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of strain LQC 2422 in MRS, mMRS broth and WFE, both at initial pH 6 and pH 5, for 21 h. The lowest temperature was used as control. (C) Effect of substrate on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of strain LQC 2422 in MRS, mMRS broth and WFE, both at initial pH 6 and pH 5, at 30, 37 and 20 °C, for 21 h, using MRS broth as control. In the comparison between WFE and mMRS broth, the latter was used as control. If visible, lime, coral and aquamarine bars correspond to *pln423* (*plαA), plαB* and *plαD*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

Figure S14. (A) Effect of pH decrease, namely from 6 to 5, on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of *Lp. plantarum* strain LQC 2516 in MRS, mMRS broth and WFE, at 30, 37 and 20 °C, for 21 h. Growth at pH 6 was used as control. (B) Effect of temperature increase, namely from 20 to 30 and 37 °C, on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of strain LQC 2516 in MRS, mMRS broth and WFE, both at initial pH 6 and pH 5, for 21 h. The lowest temperature was used as control. (C) Effect of substrate on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of strain LQC 2516 in MRS, mMRS broth and WFE, both at initial pH 6 and pH 5, at 30, 37 and 20 °C, for 21 h, using MRS broth as control. In the comparison between WFE and mMRS broth, the latter was used as control. If visible, lime, coral and aquamarine bars correspond to *pln423* (*plαA), plαB* and *plαD*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

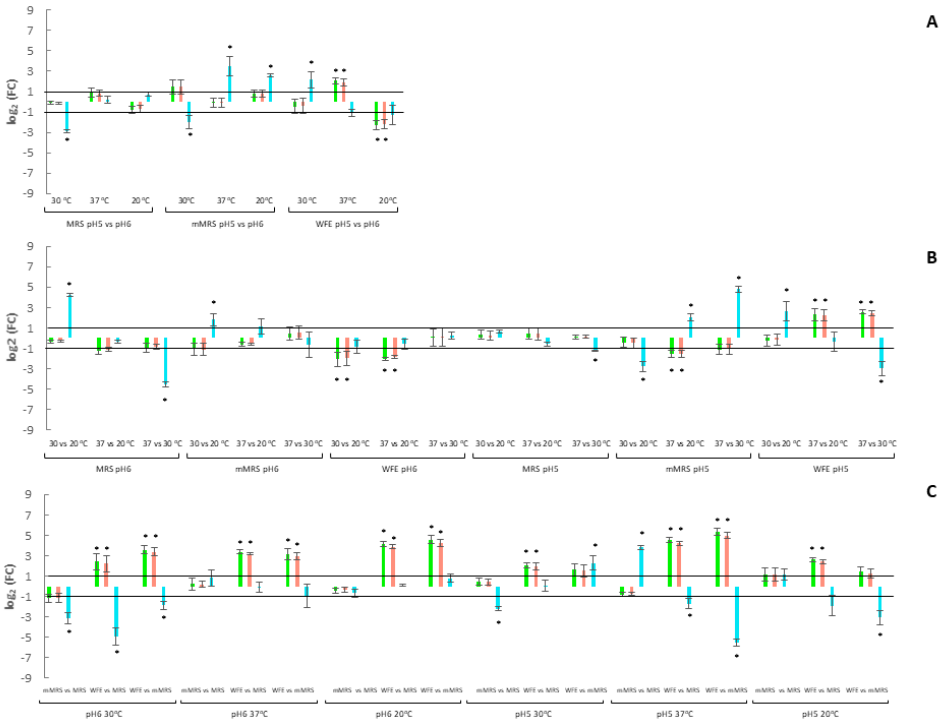

Figure S15. (A) Effect of pH decrease, namely from 6 to 5, on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of *Lp. plantarum* strain LQC 2485 in MRS, mMRS broth and WFE, at 30, 37 and 20 °C, for 21 h. Growth at pH 6 was used as control. (B) Effect of temperature increase, namely from 20 to 30 and 37 °C, on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of strain LQC 2485 in MRS, mMRS broth and WFE, both at initial pH 6 and pH 5, for 21 h. The lowest temperature was used as control. (C) Effect of substrate on the relative transcription of *pln423* (*plαA), plαB* and *plαD*, during growth of strain LQC 2485 in MRS, mMRS broth and WFE, both at initial pH 6 and pH 5, at 30, 37 and 20 °C, for 21 h, using MRS broth as control. In the comparison between WFE and mMRS broth, the latter was used as control. If visible, lime, coral and aquamarine bars correspond to *pln423* (*plαA), plαB* and *plαD*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

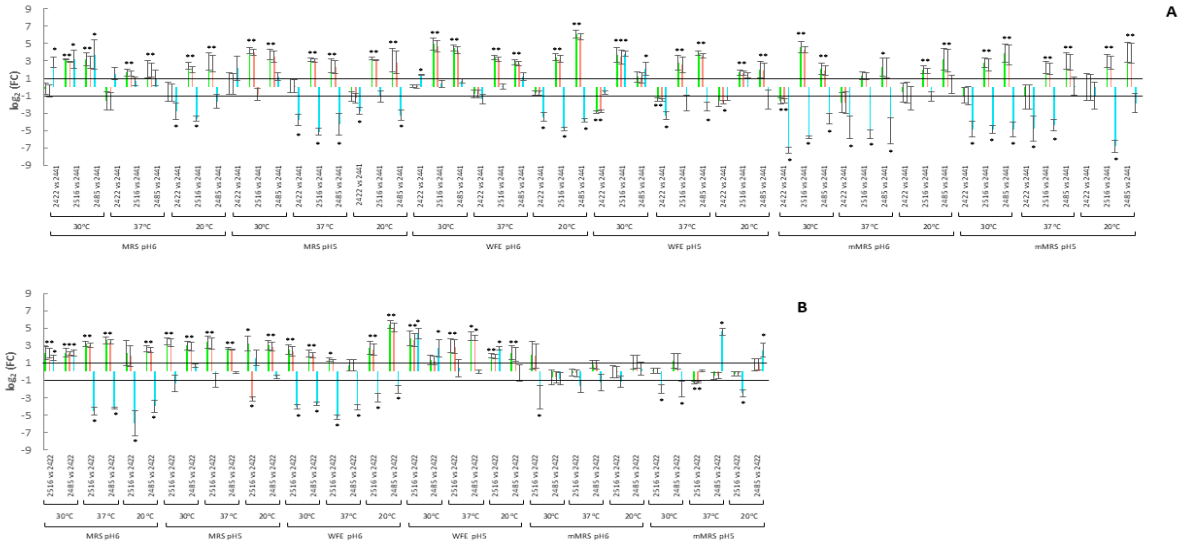

Figure S16. (A) Effect of strain on the relative transcription of *pln423* (*plα*A), *plαB* and *plαD* during growth of the *Lp. plantarum* strains LQC 2441, 2422, 2485 and 2516 in MRS, mMRS broth and WFE, at 30, 37 and 20 °C, for 21 h. Strain LQC 2441 was used as control. (B) Effect of strain on the relative transcription of *pln423* (*plα*A), *plαB* and *plαD* during growth of the *Lp. plantarum* strains LQC 2485 and 2516 in MRS, mMRS broth and WFE, at 30, 37 and 20 °C, for 21 h. Strain LQC 2422 as control. If visible, lime, coral and aquamarine bars correspond to *pln423* (*plαA*), *plαB* and *plαD*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

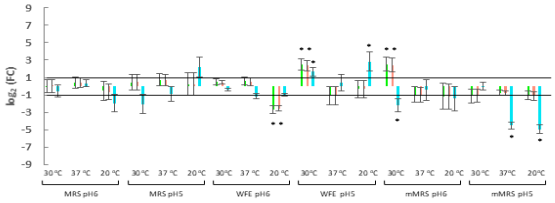

Figure S17. Effect of strain on the relative transcription of *pln423* (*plα*A), *plαB* and *plαD* during growth of the *Lp. plantarum* strains LQC 2485 and 2516 in MRS, mMRS broth and WFE, at 30, 37 and 20 °C, for 21 h. Strain LQC 2485 was used as control. If visible, lime, coral and aquamarine bars correspond to *pln423* (*plαA*), *plαB* and *plαD*, respectively. Error bars represent the standard deviation of the mean value. Presence of asterisks indicates that the relative transcription was above 1 or below -1 (the values that were used as threshold) at $p < 0.05$.

Table S1. Mean plantaricin activity (AU/ mL), population (log CFU/ mL) and final pH value, with 95.0% confidence intervals. The means were obtained from the in-pair interactions of sourdough related parameters. Independent factors included: 6 *Lp. plantarum* strains, namely LQC 2441, 2422, 2516, 2485, 2320 and 2520 corresponding to 1, 2, 3, 4, 5 and 6, three incubation temperatures, namely 20, 30 and 37 °C, three substrates, namely MRS broth, mMRS broth and WFE corresponding to 1, 2, 3 and two initial pH values, namely 5 and 6.

Mean plantaricin activity				
Level	**Count**	**Mean**	**Lower Limit**	**Upper Limit**
Strain by Temperature				
1,20	24	746.667	630.103	863.23
1,30	24	1493.33	1376.77	1609.9
1,37	24	1493.33	1376.77	1609.9
2,20	24	746.667	630.103	863.23
2,30	24	1493.33	1376.77	1609.9
2,37	24	1493.33	1376.77	1609.9
3,20	24	746.667	630.103	863.23
3,30	24	1493.33	1376.77	1609.9
3,37	24	1493.33	1376.77	1609.9
4,20	24	746.667	630.103	863.23
4,30	24	1493.33	1376.77	1609.9
4,37	24	1493.33	1376.77	1609.9
5,20	24	133.333	16.7698	249.897
5,30	24	133.333	16.7698	249.897
5,37	24	133.333	16.7698	249.897
6,20	24	133.333	16.7698	249.897
6,30	24	133.333	16.7698	249.897
6,37	24	133.333	16.7698	249.897
Strain by Substrate				
1,1	24	1386.67	1270.1	1503.23
1,2	24	1813.33	1696.77	1929.9
1,3	24	533.333	416.77	649.897
2,1	24	1386.67	1270.1	1503.23
2,2	24	1813.33	1696.77	1929.9
2,3	24	533.333	416.77	649.897
3,1	24	1386.67	1270.1	1503.23
3,2	24	1813.33	1696.77	1929.9
3,3	24	533.333	416.77	649.897
4,1	24	1386.67	1270.1	1503.23
4,2	24	1813.33	1696.77	1929.9
4,3	24	533.333	416.77	649.897
5,1	24	160.0	43.4364	276.564
5,2	24	160.0	43.4364	276.564
5,3	24	80.0	-36.5636	196.564
6,1	24	160.0	43.4364	276.564
6,2	24	160.0	43.4364	276.564
6,3	24	80.0	-36.5636	196.564
Mean population				
Level	**Count**	**Mean**	**Lower Limit**	**Upper Limit**
Strain by Temperature				
1,20	24	8.9325	8.87466	8.99034
1,30	24	9.22417	9.16633	9.282
1,37	24	9.09542	9.03758	9.15325
2,20	24	8.89583	8.838	8.95367

2,30	24	9.155	9.09716	9.21284
2,37	24	9.15208	9.09425	9.20992
3,20	24	8.93333	8.8755	8.99117
3,30	24	9.18917	9.13133	9.247
3,37	24	9.08042	9.02258	9.13825
4,20	24	8.90833	8.8505	8.96617
4,30	24	9.20333	9.1455	9.26117
4,37	24	9.07708	9.01925	9.13492
5,20	24	8.95583	8.898	9.01367
5,30	24	9.23	9.17216	9.28784
5,37	24	9.13333	9.0755	9.19117
6,20	24	8.9425	8.88466	9.00034
6,30	24	9.2525	9.19466	9.31034
6,37	24	9.17083	9.113	9.22867
Strain by Substrate				
1,1	24	9.10875	9.05091	9.16659
1,2	24	9.38167	9.32383	9.4395
1,3	24	8.76167	8.70383	8.8195
2,1	24	9.11208	9.05425	9.16992
2,2	24	9.38083	9.323	9.43867
2,3	24	8.71	8.65216	8.76784
3,1	24	9.14625	9.08841	9.20409
3,2	24	9.39583	9.338	9.45367
3,3	24	8.66083	8.603	8.71867
4,1	24	9.13875	9.08091	9.19659
4,2	24	9.375	9.31716	9.43284
4,3	24	8.675	8.61716	8.73284
5,1	24	9.18417	9.12633	9.242
5,2	24	9.39417	9.33633	9.452
5,3	24	8.74083	8.683	8.79867
6,1	24	9.175	9.11716	9.23284
6,2	24	9.41917	9.36133	9.477
6,3	24	8.77167	8.71383	8.8295
Substrate by Temperature				
1,20	48	8.89958	8.85869	8.94048
1,30	48	9.28042	9.23952	9.32131
1,37	48	9.2525	9.2116	9.2934
2,20	48	9.27417	9.23327	9.31506
2,30	48	9.60125	9.56035	9.64215
2,37	48	9.29792	9.25702	9.33881
3,20	48	8.61042	8.56952	8.65131
3,30	48	8.74542	8.70452	8.78631
3,37	48	8.80417	8.76327	8.84506
Mean final pH value				
Level	**Count**	**Mean**	**Lower Limit**	**Upper Limit**
Strain by Temperature				
1,20	24	4.43167	4.40092	4.46241
1,30	24	3.645	3.61425	3.67575
1,37	24	3.65667	3.62592	3.68741
2,20	24	4.435	4.40425	4.46575
2,30	24	3.65083	3.62009	3.68158
2,37	24	3.65833	3.62759	3.68908
3,20	24	4.39583	4.36509	4.42658
3,30	24	3.63917	3.60842	3.66991

3,37	24	3.63667	3.60592	3.66741
4,20	24	4.38667	4.35592	4.41741
4,30	24	3.65583	3.62509	3.68658
4,37	24	3.6525	3.62175	3.68325
5,20	24	4.38167	4.35092	4.41241
5,30	24	3.69917	3.66842	3.72991
5,37	24	3.6325	3.60175	3.66325
6,20	24	4.40417	4.37342	4.43491
6,30	24	3.64083	3.61009	3.67158
6,37	24	3.63667	3.60592	3.66741
Initial pH by Strain				
5,1	36	3.84778	3.82267	3.87288
5,2	36	3.83389	3.80879	3.85899
5,3	36	3.79056	3.76545	3.81566
5,4	36	3.79611	3.77101	3.82121
5,5	36	3.81889	3.79379	3.84399
5,6	36	3.78778	3.76267	3.81288
6,1	36	3.97444	3.94934	3.99955
6,2	36	3.99556	3.97045	4.02066
6,3	36	3.99056	3.96545	4.01566
6,4	36	4.00056	3.97545	4.02566
6,5	36	3.99	3.9649	4.0151
6,6	36	4.0	3.9749	4.0251

Table S2. Mean plantaricin activity for each strain, with 95.0 % confidence intervals. The treatment was applied at regular time intervals of 3 h, over a period of 33 h. The 6 *Lp. plantarum* strains, namely LQC 2441, 2422, 2516, 2485, 2320 and 2520 correspond to 1, 2, 3, 4, 5 and 6, respectively.

Incubation time	Level-Strain	Count	Mean	Lower Limit	Upper Limit
3 h	1	72	248.889	244.24	253.537
	2	72	248.889	244.24	253.537
	3	72	248.889	244.24	253.537
	4	72	248.889	244.24	253.537
	5	72	0	-4.64843	4.64843
	6	72	0	-4.64843	4.64843
6 h	1	72	320.0	307.392	332.608
	2	72	337.778	325.17	350.385
	3	72	320.0	307.392	332.608
	4	72	328.889	316.281	341.497
	5	72	53.3333	40.7257	65.941
	6	72	53.3333	40.7257	65.941
9 h	1	72	480.0	457.236	502.764
	2	72	480.0	457.236	502.764
	3	72	471.111	448.347	493.875
	4	72	462.222	439.459	484.986
	5	72	80.0	57.2363	102.764
	6	72	80.0	57.2363	102.764
12 h	1	72	653.333	623.95	682.717
	2	72	640.0	610.617	669.383
	3	72	644.444	615.061	673.828
	4	72	640.0	610.617	669.383
	5	72	80.0	50.6168	109.383
	6	72	80.0	50.6168	109.383
15 h	1	72	866.667	819.473	913.861
	2	72	848.889	801.695	896.083
	3	72	862.222	815.028	909.416
	4	72	848.889	801.695	896.083
	5	72	80.0	32.806	127.194
	6	72	80.0	32.806	127.194
18 h	1	72	1137.78	1067.88	1207.68
	2	72	1137.78	1067.88	1207.68
	3	72	1137.78	1067.88	1207.68
	4	72	1137.78	1067.88	1207.68
	5	72	97.7778	27.8772	167.678
	6	72	97.7778	27.8772	167.678
21 h	1	72	1244.44	1177.15	1311.74
	2	72	1244.44	1177.15	1311.74
	3	72	1244.44	1177.15	1311.74
	4	72	1244.44	1177.15	1311.74
	5	72	133.333	66.0353	200.631
	6	72	133.333	66.0353	200.631
24 h	1	72	862.222	834.187	890.258
	2	72	862.222	834.187	890.258
	3	72	862.222	834.187	890.258
	4	72	880.0	851.965	908.035
	5	72	80.0	51.9645	108.035
	6	72	80.0	51.9645	108.035
27 h	1	72	586.667	550.065	623.268

	2	72	586.667	550.065	623.268
	3	72	586.667	550.065	623.268
	4	72	586.667	550.065	623.268
	5	72	80.0	43.3982	116.602
	6	72	80.0	43.3982	116.602
30 h	1	72	586.667	550.065	623.268
	2	72	586.667	550.065	623.268
	3	72	586.667	550.065	623.268
	4	72	586.667	550.065	623.268
	5	72	80.0	43.3982	116.602
	6	72	80.0	43.3982	116.602
33 h	1	72	586.667	550.065	623.268
	2	72	586.667	550.065	623.268
	3	72	586.667	550.065	623.268
	4	72	586.667	550.065	623.268
	5	72	80.0	43.3982	116.602
	6	72	80.0	43.3982	116.602

Table S3. Pearson product moment (r) correlations between the relative transcription of the 18 plantaricin genes present in the genome of *Lp. plantarum* strains LQC 2320 and 2520 and plantaricin activity.

Variables		ΔAU	*plNC8a*	*plNC8β*	*plNC8c*	*plnL*	*plnR*	*plnK*	*plnJ*	*plnE*	*plnF*	*plnH*	*plnS*	*plnY*	*plNC8IF*	*plNC8HK*	*plnD*	*plnM*	*plnI*	*plnG*
ΔAU	**r**	**1**																		
	p	**0**																		
plNC8a	**r**	0.063	**1**																	
	p	0.725	**0**																	
plNC8β	**r**	0.161	**0.840**	**1**																
	p	0.363	**< 0.0001**	**0**																
plNC8c	**r**	0.045	**0.996**	**0.838**	**1**															
	p	0.802	**< 0.0001**	**< 0.0001**	**0**															
plnL	**r**	0.316	**0.617**	**0.806**	**0.614**	**1**														
	p	0.069	**0.000**	**< 0.0001**	**0.000**	**0**														
plnR	**r**	0.316	**0.621**	**0.805**	**0.618**	**1.000**	**1**													
	p	0.089	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**													
plnK	**r**	0.327	**0.613**	**0.803**	**0.610**	**0.999**	**0.999**	**1**												
	p	0.059	**0.000**	**< 0.0001**	**0.000**	**< 0.0001**	**< 0.0001**	**0**												
plnJ	**r**	**0.375**	**0.668**	**0.835**	**0.666**	**0.971**	**0.971**	**0.972**	**1**											
	p	**0.029**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**											
plnE	**r**	0.017	**0.437**	**0.643**	**0.433**	**0.823**	**0.818**	**0.822**	**0.760**	**1**										
	p	0.923	**0.010**	**< 0.0001**	**0.011**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**										
plnF	**r**	0.247	**0.633**	**0.834**	**0.631**	**0.944**	**0.942**	**0.946**	**0.929**	**0.905**	**1**									
	p	0.158	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**									
plnH	**r**	0.310	**0.806**	**0.904**	**0.800**	**0.887**	**0.886**	**0.889**	**0.916**	**0.671**	**0.871**	**1**								
	p	0.074	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**								
plnS	**r**	**0.395**	**0.718**	**0.872**	**0.712**	**0.943**	**0.942**	**0.946**	**0.966**	**0.772**	**0.931**	**0.955**	**1**							
	p	**0.021**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**							
plnY	**r**	**0.366**	**0.806**	**0.905**	**0.802**	**0.835**	**0.835**	**0.839**	**0.890**	**0.606**	**0.839**	**0.953**	**0.922**	**1**						

	p	**0.033**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0.000**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**					
plNC8-IF	**r**	**0.383**	**0.420**	**0.663**	**0.409**	**0.835**	**0.833**	**0.836**	**0.813**	**0.846**	**0.886**	**0.687**	**0.826**	**0.726**	**1**				
	p	**0.026**	**0.013**	**< 0.0001**	**0.016**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**				
plNC8-HK	**r**	**0.384**	**0.425**	**0.665**	**0.414**	**0.837**	**0.835**	**0.838**	**0.816**	**0.848**	**0.887**	**0.691**	**0.828**	**0.730**	**1.000**	**1**			
	p	**0.025**	**0.012**	**< 0.0001**	**0.015**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**			
plnD	**r**	**0.398**	**0.414**	**0.669**	**0.403**	**0.847**	**0.845**	**0.848**	**0.825**	**0.844**	**0.890**	**0.691**	**0.832**	**0.731**	**0.998**	**0.998**	**1**		
	p	**0.020**	**0.015**	**< 0.0001**	**0.018**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**		
plnM	**r**	**0.425**	**0.643**	**0.827**	**0.631**	**0.930**	**0.929**	**0.932**	**0.943**	**0.731**	**0.888**	**0.943**	**0.966**	**0.907**	**0.819**	**0.822**	**0.827**	**1**	
	p	**0.012**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**	
plnI	**r**	**0.338**	**0.788**	**0.886**	**0.783**	**0.891**	**0.891**	**0.893**	**0.914**	**0.705**	**0.884**	**0.987**	**0.958**	**0.934**	**0.716**	**0.719**	**0.718**	**0.946**	**1**
	p	**0.051**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0**
plnG	**r**	0.232	**0.806**	**0.914**	**0.816**	**0.799**	**0.798**	**0.797**	**0.839**	**0.578**	**0.770**	**0.893**	**0.881**	**0.880**	**0.634**	**0.637**	**0.642**	**0.842**	**0.878**
	p	0.187	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**0.000**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**	**< 0.0001**

The relative transcription and the change in plantaricin activity (ΔAU) were calculated using the data from each strain after growth in WFE with initial pH value 5 at 20 °C for 21 h. Statistically significant correlations ($p < 0.05$) are presented in bold.

Table S4. Pearson product moment (r) correlations between the relative transcription of the 3 plantaricin genes present in the genome of *Lp. plantarum* strains LQC 2422, 2441, 2485 and 2516 and plantaricin activity.

Variables		ΔAU	*pln423* (*plaA*)	*plαB*	*plαD*
ΔAU	**r**	**1**			
	p	**0**			
***pln423* (*plaA*)**	**r**	**-0.528**	**1**		
	p	**< 0.0001**	**0**		
plαB	**r**	**-0.529**	**0.999**	**1**	
	p	**< 0.0001**	**< 0.0001**	**0**	
plαD	r	0.166	-0.216	-0.223	**1**
	p	0.177	0.077	0.067	**0**

Statistically significant correlations ($p < 0.05$) are presented in bold.