Supplementary Information

Detection and Physicochemical Characterization of Membrane Vesicles (MVs) of *Lactobacillus reuteri* DSM 17938.

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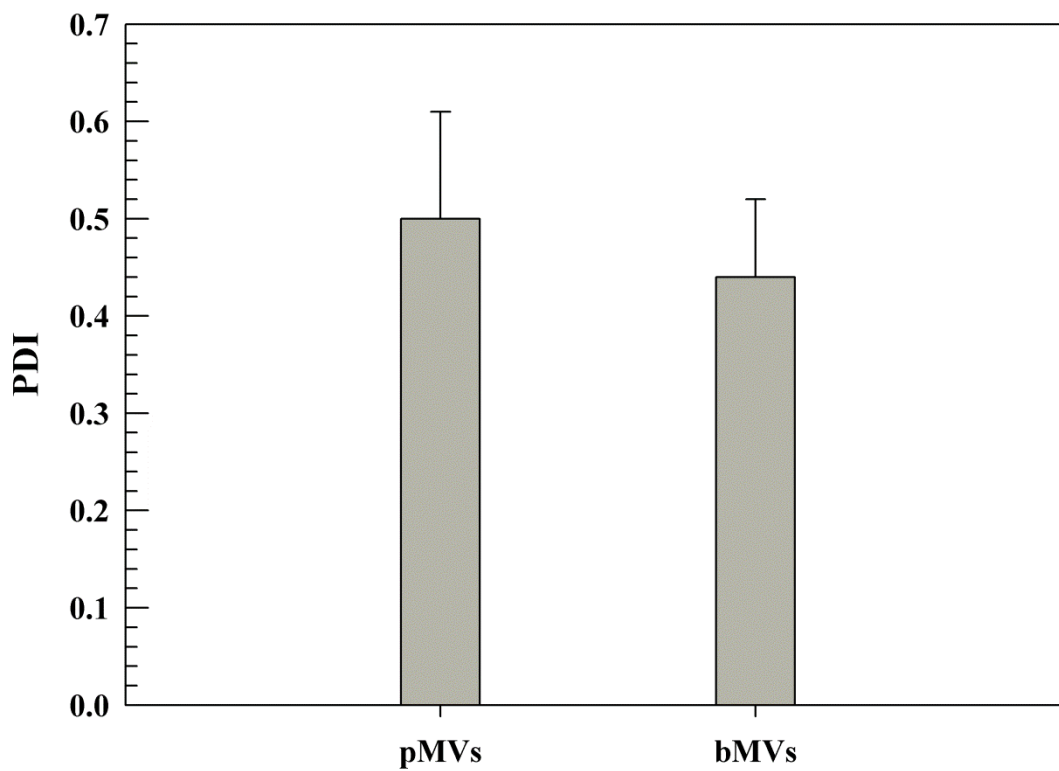
Figure S1. PDI of the pMVs and bMVs of *Lactobacillus reuteri* DSM 17938. The analysis was carried out at 25°C, and data are the average of ten measurements $\pm$ standard deviation as triplicates. The error bar if not visible is within the symbol.
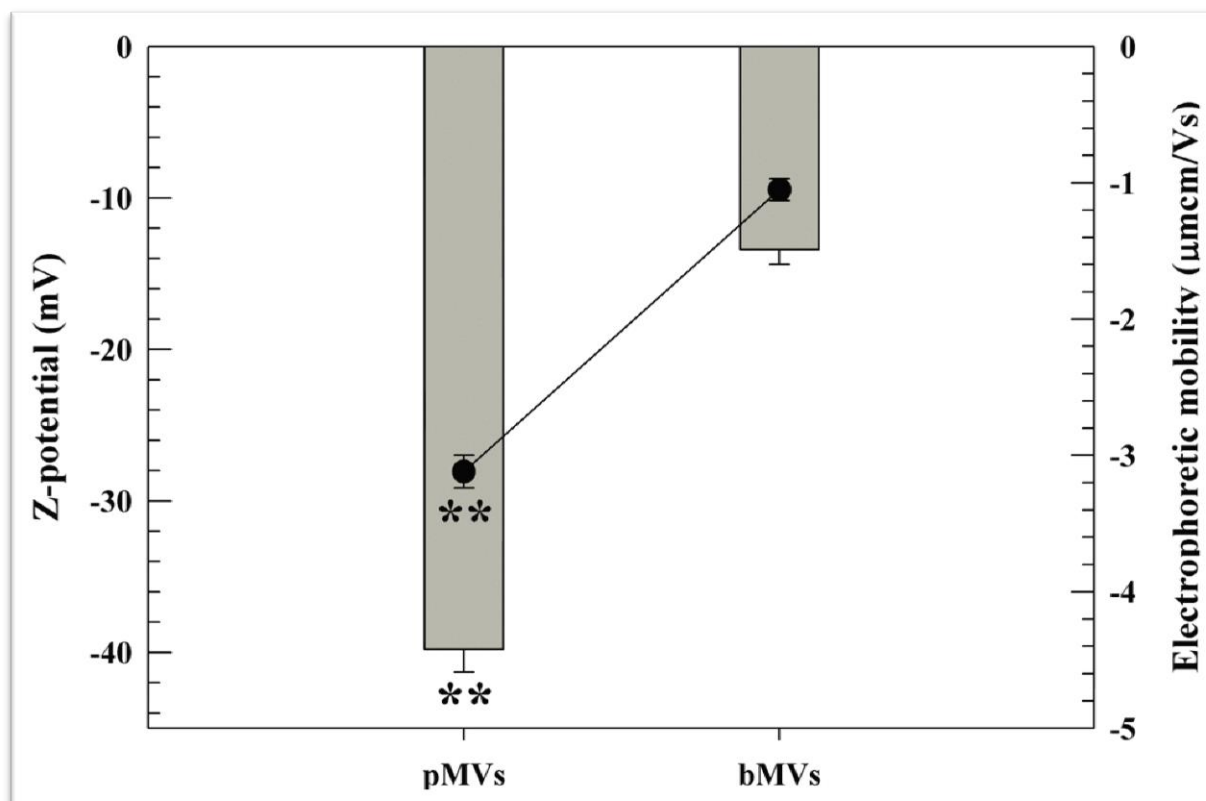
Figure S2. Z – potential and electrophoretic mobility of the pMVs and bMVs of *Lactobacillus reuteri* DSM 17938. The histograms represent the Z – potential values (mV); while the black full circles are the electrophoretic mobility [(μm × cm)/Vs]. The analysis was carried out at 25°C, and data are the average of ten measurements ± standard deviation as triplicates. The error bar if not visible is within the symbol. **$p < 0.01$.
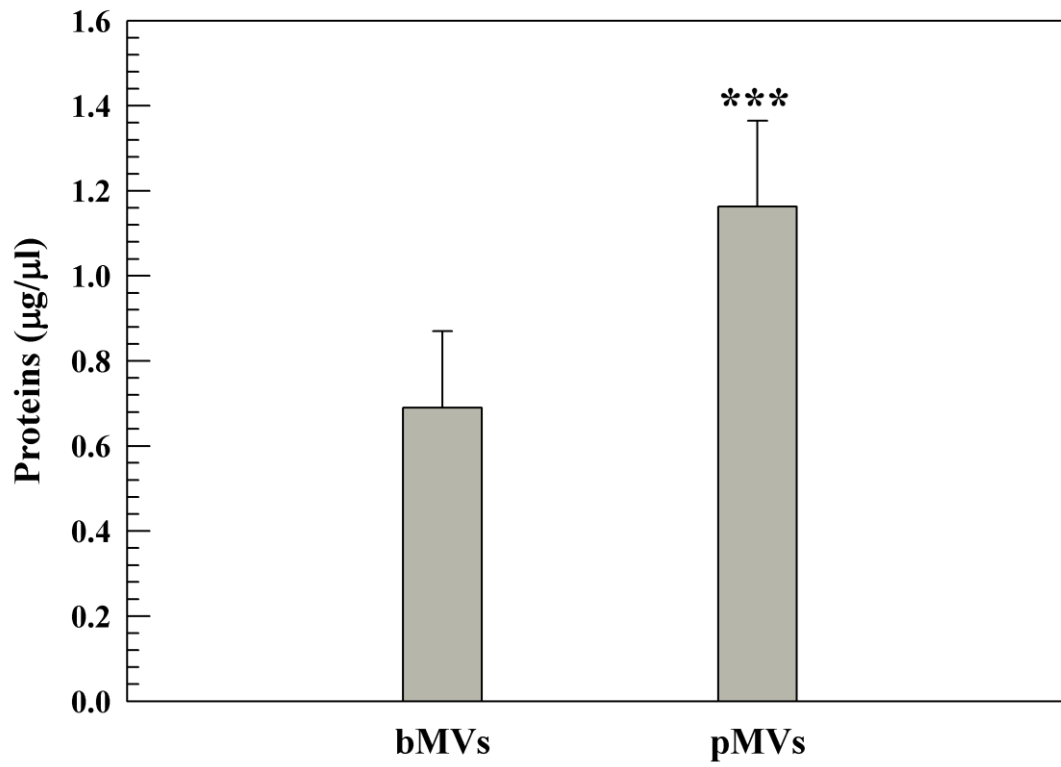
Figure S3. Quantification of proteins associated to pMVs and bMVs. The protein quantification was carried out using the BCA Protein Assay Kit. ***$p \leq 0.001$ compared to pMVs.

Table S1. Averaged tracking analysis of particles versus sizes (nm) for biofilm and planktonic phenotypes of *Lactobacillus reuteri* DSM 17938. D10, D50 and D90 show the average size of 10, 50 and 90% of particles distributed in different samples. The final concentration of bMVs and pMVs was 4.04×10^{10} (particles/ml), and 2.22×10^{10} (particles/ml), respectively. Samples were dispersed in phosphate buffer saline (PBS) before the analysis.

Samples	D10 ± S.E.M.[c]	D50 ± S.E.M.[c]	D90 ± S.E.M.[c]
bMVs[a]	62.5 ± 1.2	107.4 ± 2.1	200.6 ± 1.7
pMVs[b]	80.1 ± 2.2	129.4 ± 1.1	210.3 ± 1.6

[a]biofilm-associated MVs; [b]planktonic – associated MVs; [c]standard error of the mean (SEM).

Supplementary movie 1: https://figshare.com/articles/Supplementary_Movie_1_avi/4690132

Supplementary movie 2: https://figshare.com/articles/Supplementary_Movie_2/4690141