



Supplementary file

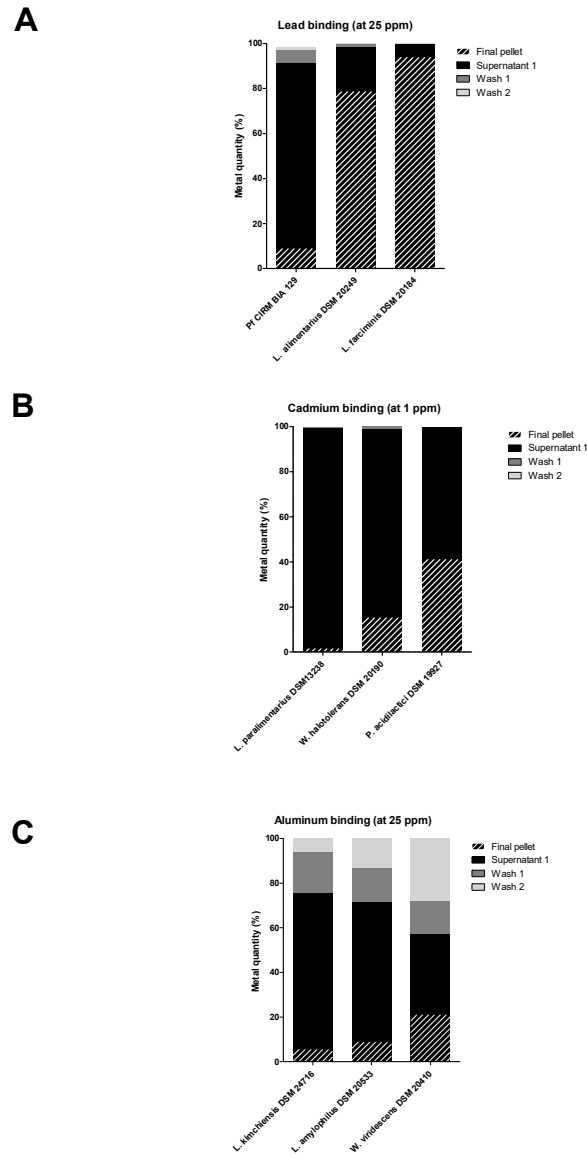


Figure S1: Selected examples of bacterial strains with distinct metal removal capabilities, demonstrating the accuracy of the assays for Pb (A), Cd (B) and Al (C). Metals were quantified in the binding supernatant, in the two washing buffers, and in the final bacterial pellet.

Strain	Cd removal capacity	Cd MIC (ppm)
<i>L. mucosae</i> DSM13345	5.86%	11 ppm
<i>L. ingluviei</i> DSM15946	13.08%	11 ppm
<i>P. inopinatus</i> DSM20285	16.75%	11 ppm
<i>L. hordei</i> DSM19519	10.63%	29 ppm
<i>L. senmaizukei</i> DSM21775	3.54%	29 ppm
<i>L. paralimentarius</i> DSM13238	1.57%	34.5 ppm
<i>L. satsumensis</i> DSM16230	11.39%	34.5 ppm
<i>L. casei</i> DSM20011	23.59%	34.5 ppm
<i>L. gallinarum</i> DSM10532	5.66%	> 55 ppm
<i>W. confusa</i> DSM20196	15.81%	> 55 ppm
<i>L. hominis</i> DSM23910	13.83%	> 55 ppm
<i>L. acidophilus</i> DSM20079	8.06%	> 55 ppm
<i>L. fructosus</i> DSM20349	11.78%	> 55 ppm

Figure S2: Selected examples of bacterial strains with equivalent MICs for Cd but different Cd removal capacities, illustrating the lack of a relationship between metal resistance and metal binding. MICs were determined in 24-hr liquid cultures. The Cd removal capacity is color-coded as weak (0 to 10%: pale green), low (11 to 20%: blue), and moderate (21 to 30%: orange).