

Heavy metal adsorption by His6 tag display on the B.subtilis surface using Sortase and Sortase substrate

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We used the sortase substrate as anchoring motif to display His6 tag on the B.subtilis cell surface. The sortase substrate has sorting signal at its C-terminal and the sortase cleaves sorting signal of the sortase substrate and make a covalent bond between the sortase substrate and peptidoglycan cell wall. therefore we inserted His6 tag in front of Sortase substrate gene. constructed vector was transformed in B.subtilis. we confirmed His6 tag surface display by flow cytometry. In the future research, we'll analyse heavy metal adsorption by Atomic Adsorption spectrometry and we'll display CotA using this system.