



Cell wall-binding (CWB) domain of *Staphylococcus aureus* autolysin is used as an affinity reagent for bacteria.

Fluorescence image of CWB-GFP (green-fluorescent protein) fusion that binds to gram-positive bacteria is shown in this cover page. Growing bacteria are mixed with purified CWB-GFP and then observed with a fluorescence microscope. *S. aureus*, *Corynebacterium glutamicum*, *Bacillus subtilis*, *Escherichia coli*, *Agrobacterium tumefaciens*, and *Pseudomonas aeruginosa* were used (from top left to bottom right). Phase-contrast (left) and GFP (right) images are shown. CWB-GFP bound to a wide range of gram-positive bacteria, but not to most gram-negative bacteria.

Related article: Ahmed, A. B. F., Noguchi, K., Asami, Y., Nomura, K., Fujii, H., Sakata, M., Tokita, A., Noda, K., and Kuroda, A., "Evaluation of cell wall binding domain of *Staphylococcus aureus* autolysin as affinity reagent for bacteria and its application to bacterial detection", *J. Biosci. Bioeng.*, vol. 104, 55-61 (2007).