

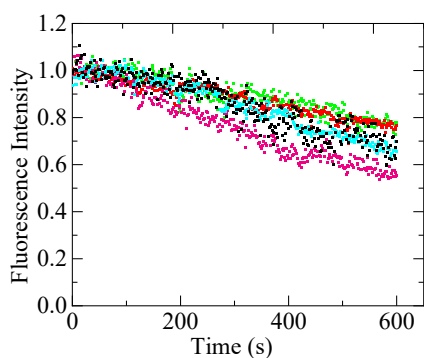
## Supporting information

### Effect of Membrane Potential on Entry of Lactoferricin B-derived 6-Residue Antimicrobial Peptide into Single *Escherichia coli* Cells and Lipid Vesicles

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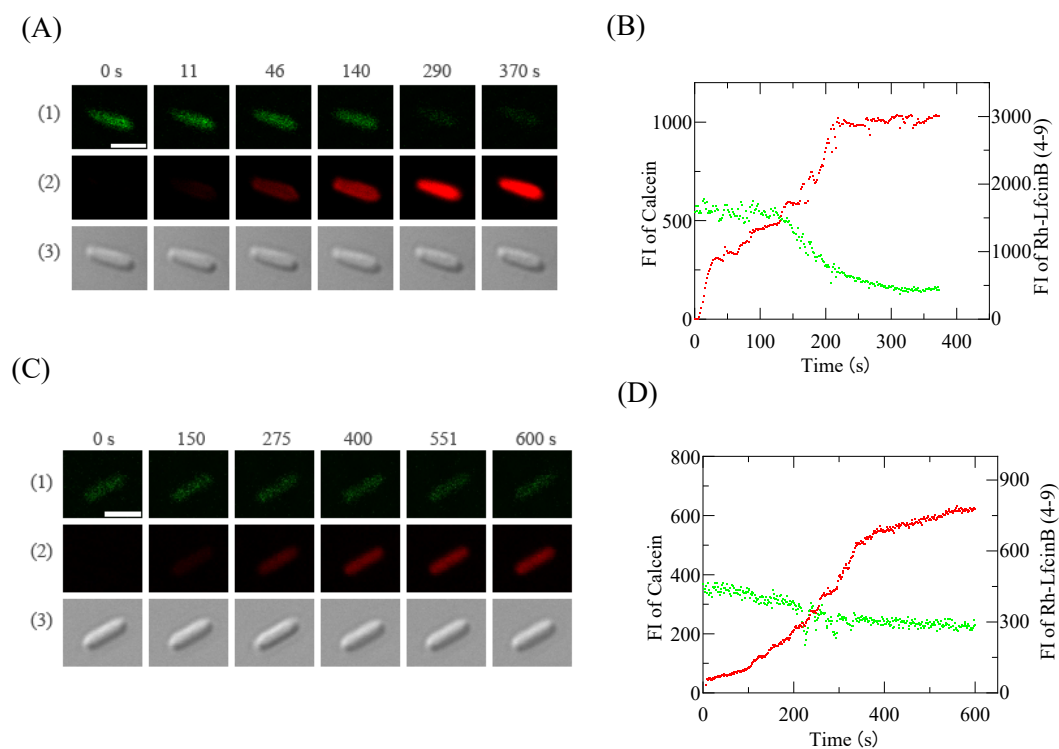
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**Figure S1**



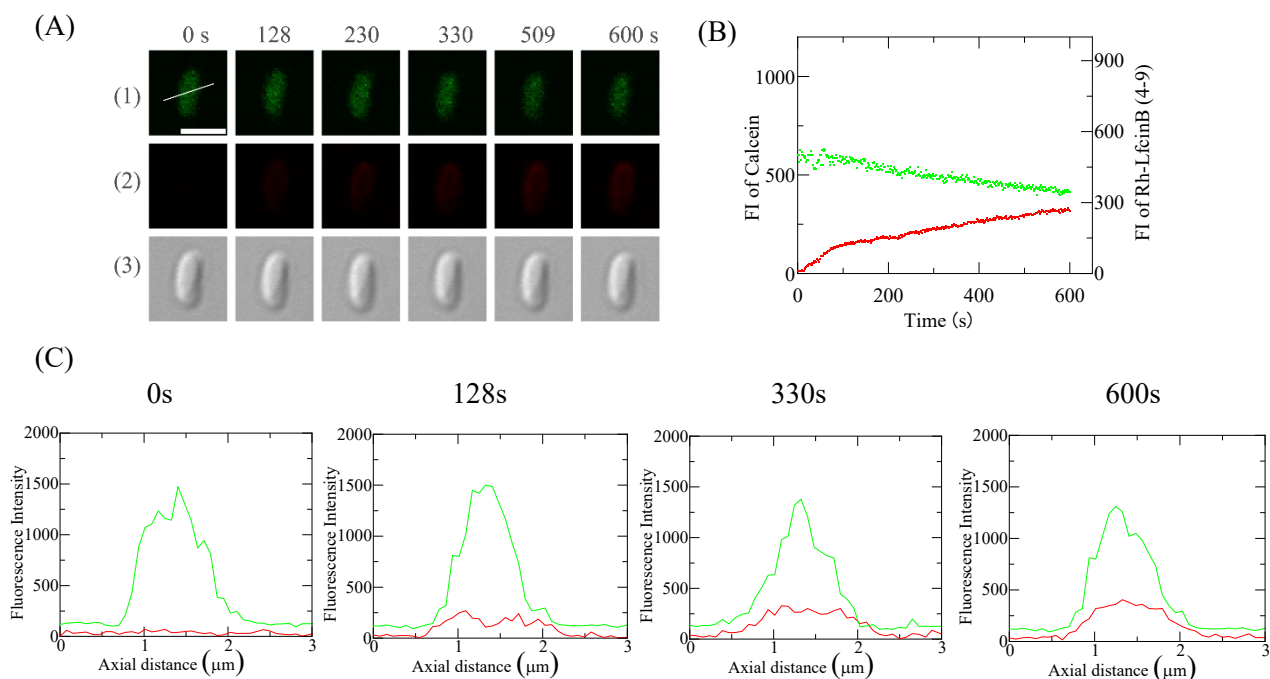
**Figure S1:** Time course of normalized FI of several *E. coli* cells in the absence of Rh-LfciB (4-9).

**Figure S2**



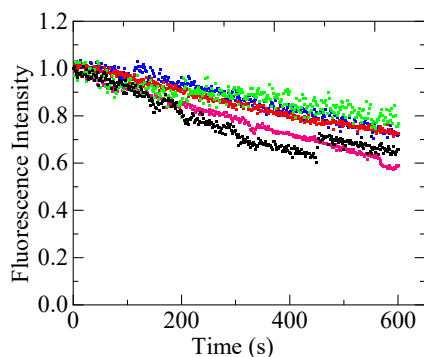
**Figure S2:** Interaction of Rh-LfcinB (4-9) with single *E. coli* cells containing calcein. (A)(C) CLSM images due to (1) calcein, (2) Rh-LfcinB (4-9), and (3) DIC of an *E. coli* cell interacting with 9.0  $\mu$ M Rh-LfcinB (4-9). The numbers above each image indicate the interaction time of Rh-LfcinB (4-9) with the cell. The bar is 2  $\mu$ m. (B) and (D) are time course of change in the FI of the cell shown in (A) and (C), respectively. Green line and red line correspond to the FI of the cell due to calcein and that due to Rh-LfcinB (4-9), respectively.

**Figure S3**



**Figure S3:** Interaction of Rh-LfcinB (4-9) with single *E. coli* cells containing calcein. (A) CLSM images due to (1) calcein, (2) Rh-LfcinB (4-9), and (3) DIC of an *E. coli* cell interacting with 2.0 μM Rh-LfcinB (4-9). The numbers above each image indicate the interaction time of Rh-LfcinB (4-9) with the cell. The bar is 2 μm. (B) Time course of change in the FI of the cell shown in (A). Green line and red line correspond to the FI of the cell due to calcein and that due to Rh-LfcinB (4-9), respectively. (C) The FI profiles along a white line in the cell shown in (A). Green line and red line correspond to the FI of calcein and Rh-LfcinB (4-9), respectively. To obtain each line profile, the FI profiles in the line of 3 consecutive images of the cell obtained by CLSM were superimposed to increase S/N.

**Figure S4**



**Figure S4:** Time course of normalized FI of several spheroplasts in the absence of Rh-LfcinB (4-9).