Supplementary information for
Assembly of MreB Filaments on Liposome Membranes:
A Synthetic Biology Approach

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Figure S1

Photobleaching experiment in the liposome containing YFP-MreB-18L purified protein. (A) Single liposome was bleached by blue light of 488 nm selected from Argon laser. White dotted line indicates the area where blue light was focused. The number shown in pictures is the time after photobleaching [second]. Scale bar: 6 μm. (B) Line scan of YFP fluorescence in the bleached area. Analyzed line is the yellow dotted line in Figure S1A. We found that the YFP fluorescence was recovered 25 seconds after photobleaching (black arrow indicates the bleached and recovered region). Black dotted lines correspond to the liposome membrane.
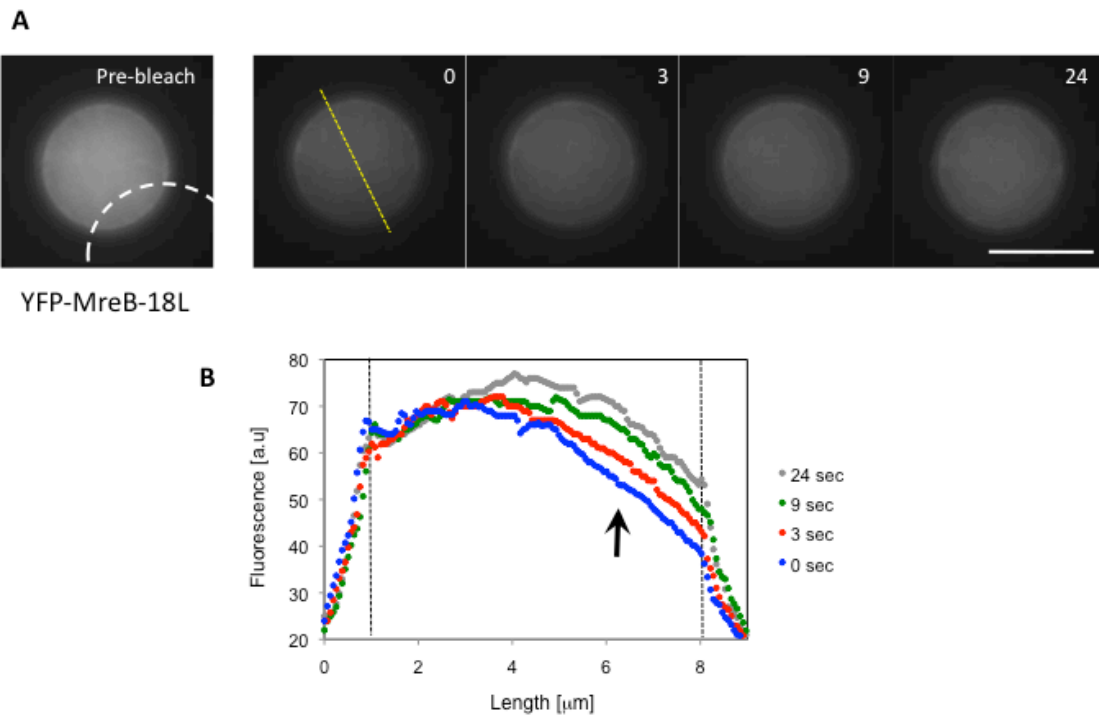
Figure S2

Two-color imaging of YFP-MreB-18L (Green) and DiI stained lipid membrane (Red). Scale bar: 5 μm.

Figure S3

Fluorescent microscopy of polymerized YFP-MreB pure protein in four different single vesicles. The polymerization is induced by the diffusion of Mg^{2+} and ATP
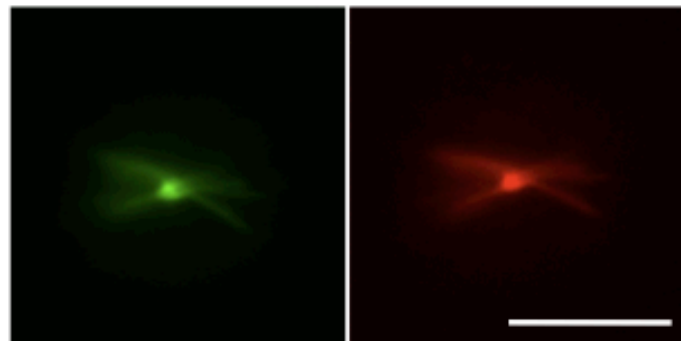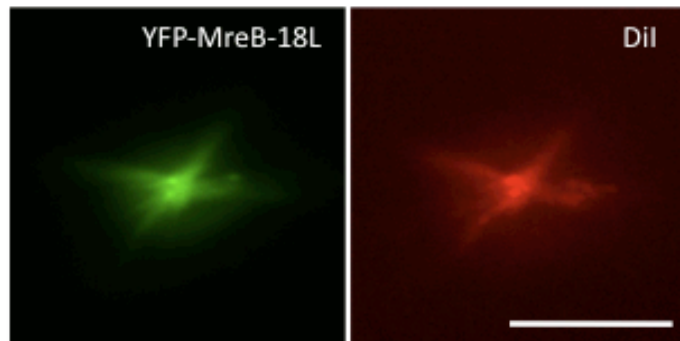
across lipid membrane through α-hemolysin pores. Scale bar: 5 μm.

Figure S1

A

YFP-MreB-18L

B

Supporting figures. Y.T.Maeda, et al.

Figure S2

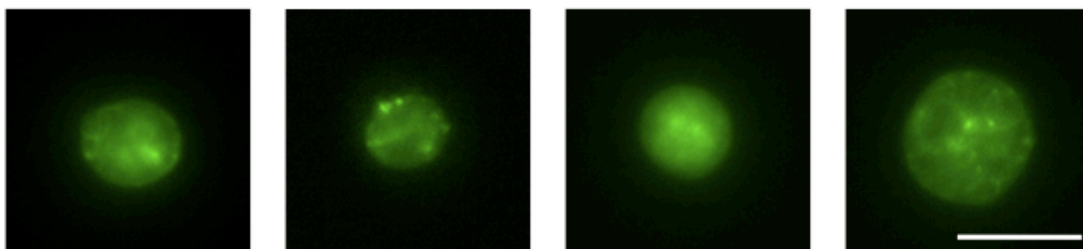YFP-MreB-18L   DiI

Supporting figures. Y.T.Maeda, et al.

Figure S3

Supporting figures. Y.T.Maeda, et al.