

Supplementary Information

A FACILE PROTOCOL FOR THE IMMOBILISATION OF VESICLES, VIRUS PARTICLES, BACTERIA, AND YEAST CELLS

Phillip Kuhn¹, Klaus Eyer¹, Tom Robinson¹, Florian I. Schmidt², Jason Mercer², Petra S.

*Dittrich^{*1}*

¹Department of Chemistry and Applied Biosciences, ETH Zurich, CH-8093 Zurich

(Switzerland)

² Institute of Biochemistry, ETH Zurich, CH-8093 Zurich (Switzerland)

**Corresponding author:*

Petra S. Dittrich

ETH Zurich, Department of Chemistry and Applied Biosciences

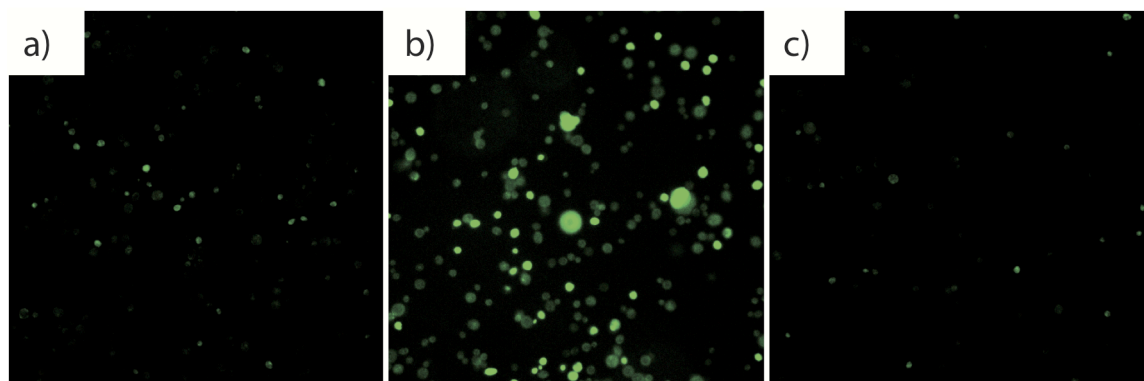
Wolfgang-Pauli-Str. 10

CH-8093 Zurich/Switzerland

e-mail: dittrich@org.chem.ethz.ch

Phone: +41 44 633 68 93

FAX: +41 44 632 12 92



SI Figure 1: Staining of yeast cell membranes. Yeast cells were incubated for 90 min at room temperature with a) PBS, b) 5 μ M cholesterol-PEG-FITC in PBS and c) 5 μ M fluorescein in PBS. Images show cells after 3 washing steps with PBS. Only the yeast cells incubated with the tagged cholesterol exhibit a higher fluorescence than the autofluorescence of yeast cells.

SI Movie 1: GUVs immobilized in the presence of flow ($\sim 60 \mu\text{m/s}$) in the microfluidic chamber. Confocal images of DiI in the membrane were recorded every 150 ms. The movie play back speed is increased 3 times.

SI Movie 2: *E. coli* (expressing GFP) immobilized in a microfluidic device as described in the main text. Bacteria cells could not be washed away with high flow rates of 200 $\mu\text{l/min}$. The channel was 2 mm by 100 μm in this experiment. Non-tethered *E. coli* visualise the flow.