

## Supplementary Information

### **Acoustofluidic bacteria separation**

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### **Video captions**

**Supplementary Video S1:** Bright-field video taken at the outlet region of the bacterial separation experiment when the taSSAW was not applied. RBCs exited the microchannel through the lower outlet.

**Supplementary Video S2:** Fluorescence video taken at the outlet region of the bacterial separation experiment when the taSSAW was not applied. *E. coli* also exited the microchannel through the lower outlet mixed with RBCs.

**Supplementary Video S3:** Bright-field video taken at the outlet region of the bacterial separation experiment when the taSSAW was applied. Most of the RBCs were pushed to the upper outlet.

**Supplementary Video S4:** Fluorescence video taken at the outlet region of the bacterial separation experiment when the taSSAW was applied. Most of the *E. coli* remained in the lower outlet and were separated from the RBCs.