Electronic Supplementary Information (ESI) for Lab on a Chip

Continuous enrichment of low-abundance cell sample using standing surface acoustic waves (SSAW)

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Video 1: Acoustic trapping at the exit of coupling region. While power was on, all of the particles were retained inside the enrichment region. Even though continuous flows were applied, no fluorescent particle was observed in the lower reaches of the microchannel, indicating effective particle trapping by SSAW.

Video 2: Acoustic trapping at the entrance of coupling region. As soon as the power was turned on, the sample was gradually enriched from the entrance of the coupling region.

Video 3: Release of the enriched sample. As soon as the power was turned off, the enriched sample was released and simultaneously removed by the flow in a short time.

Video 4: Multichannel sample enrichment. The video shows sample enrichment is performed in three channels simultaneously.